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Fig. 534

Fancy coloured lithograph

Fig. 535

Black and white labels, fancy coloured wrappers or cartons

Fig. 537

Coloured labels, fancy coloured wrappers or cartons

Fig. 538

Fancy coloured labels and cartons

Fig. 539

Fancy coloured lithograph

Fig. 543

Fancy coloured border series

Fig. 1640

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Fig. 1644

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Fig. 898

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THE BUYERS' GUIDE.

In this section, under appropriate headings, are given the names of firms advertising in this or other issues of the month. No charge is made to advertise current for advertising in this journal are mentioned. The headings refer generally to the classes of goods actually advertised, but this is not a detailed Guide such as appears in "The Chemist and Druggist Diary." Inquiries addressed to the "Information Department," THE CHEMIST AND DRUGGIST, 42 Cannon Street. London, E.C., regarding articles not appearing in these pages receive prompt attention, as shown weekly in the editorial pages.

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Dentifrices

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Beghe & Chiapetta
Beil(John), Hills & Lucas, Ltd.
Bishop, Alfred, Ltd.
Bresilion, M., & Co.
Browning, W., & Co.
Browning, W., & Co.
Browning, W., & Co.
Castle Laboratory

Burress, B.

Castle Laboratory
Christy, T., & Co.
Colman, J. & J., Ltd.
Corbyn, Stacey & Co., Ltd.
Davenport, J. T., Ltd.
Co., Ltd.
EvansSons Leschera Webb, Ld
EvansSons Leschera Webb, Ld
Evanurso Manfg, Co.
Fellows' Med. Manfg, Co.
Fellows' Med. Manfg, Co.
Fellows' Med. Manfg, Co.
Fellows' Med. Manfg, Co.
Fellows' School Co., Ltd.
Goodall, Backhonse & Ce.
Hardcastle, W., & Sons
Henry, T. & W. Hesmadoger
Hommels, W. & Sons
Henry, T. & W. Hesmadoger
Hommels, Challed Chem. Co., Ltd.
July Med. Laborator Co., Ltd.
July Med. Labo

International Chem. Co., Ltd.
International Chem. Co., Ltd.
Approx. Aprox. Ltd.
Kyho Proprietary. Ltd.
Kyho Proprietary. Ltd.
Martindale, W.
May, Roherts & Co., Ltd.
Morkan Jones & Ce.
Mumford, S., & Sons.
Newbery, F., & Sons, Ltd.
Odol Chemical Works.
Oppenhelmer, Son & Co., Ltd.
Peat Products (Sphagnol) Ltd.
Peat Products (Sphagnol) Ltd.
Peat Products (Sphagnol) Ltd.
Primer, J.
Resinol Chemical Co.
Sangers

Riner, J. Resinol Chemical Co.
Sangers
Scott & Bowne, Ltd.
Scott & Turner, Ltd.
Scott & Turner, Ltd.
Standard Tablet & Pill Co. Ld.
Thompson & Capper, Ltd.
Tokalon Ltd.
Tokalon Ltd.
Wander, A., Ltd.
Warrick Bros. Ltd.
White, A. J., Ltd.
White, A. J., Ltd.
Willoox, Jozean & Co.
Woodward, W., Ltd
Wright & Co.
Wright & Co.
Wright, Layman & Umney, Ld

Puffs Schntze. F., & Co., Ltd. Solport Bros.

Pyrogallic Acid Greeff, R. W., & Co.

Owinine and Salts Allance Drug & Chem. Co.
Bandoene Onlinine Factory
Carnegie Bros.
Corhvi, Staces & Co., Ltd.
Greeff, R. W. & Co.,
Ucwards & Sons, Ltd.
Reitmeyer, Calburn & Kindersley, Ltd.

Radium Compounds

Glew. F. H.

Hovenden. R., & Sons, Ltd. Kelland, W. P. Waw, S., Son & Sons

Reagents Hopkin & Williams, Ltd.

Rennet Powder

Armour & Co., Ltd.

Resins, Resinoids Alleu, Stafford. & Sons, Ltd.

Laciarlar. J. F.. & Co.

Rancom. W.. & Son, Ltd.

Tmith. T. & H., Ltd.

Respirators Simmer & Co.

Rubber Goods Altrineham Rubher Co.
Berton. Arthur. Ltd.
Berton. Arthur. Ltd.
Burre. Warren & Ridgley, Ltd.
Haywood. J. H., Ltd.
Haywood. J. H., Ltd.
Ingram, J. G., & Son
Vaw. S., Son & Sons
Tompkins, J., Ltd.
Warre, W., & Co., Ltd.

Robber Sponges Markt & Co. (London), Ltd.

Rubber Stamps

Riebferd, C. D.

Russian Drugs, &c. Wladyslaw Hoffmann & Co.

Saccharin Saccharin Corporation, Ltd. Salicylic Acid and Salicylates Bust, W. J., & Co., Ltd.

Sanitary Towels Southall Bros. & Barclay, Ltd.

Santonine Carnegie Bros.

Saponin Pield, C. W., Ltd.

Seientific Apparatus

Parkan, Son & Co., Ltd. Pillischer, J. Ecynolds & Branson, Ltd.

Scales and Weights Avery, W. & T., Ltd. Sea Salt

Tidman & Son, Ltd. Seed Dressing

Hawker, Arthur E. Tomlinson & Hayward, Ltd.

Seeds Patter & Clarke, Ltd.

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Allen & Hanburys, Ltd.
Burromghs Welleome&Co.,Ld.
Christy, T., & Co.
BrandSons Lescher&Webh.Ld
Parke, Davis & Co.
Willeox, Joseau & Co.

Shampoo Powders Gosnell, John, & Co. Ltd Standard Tablet& Pill Co.,Ld.

Shares McAdam & Tuckniss

Sheep Dips Burt, Boulton & Haywood Ld Hawker, Arthur E. Tomlinson & Hayward, Ltd.

Shop Fittings

Shop Fittings
Ayton-Graham, Ltd.
Cook, George
Evanssons-Lescher&Webb, Ld.
Grant, D.
Haskins, S., & Bros., Ltd.
Josephs, Philip, & Sons, Ltd.
Maw, S., Son & Sons
Mills, H.
Parnall & Sons
Ruddock & Co.
Sangers

Shoulder Straps Wood, Vincent

Silverware Goods Scott, Adolph

Soap Plant

Forshaw, E., & Son, Ltd.

Soaps, Toilet, &c. Soaps, Tollet, &.c.
Allen & Hanburys, Ltd.
Bell (John), Hills & Lucas, Ld.
Bronnley, H., & Co., Ltd.
Chesebrough Manfg, Co.
Christy, Thos., & Co.
Cook, E., & Co., Ltd.
Erasmic Co., Ltd.
Erasmic Co., Ltd.
EvansSons Lescher&Webb, Ld
Evan Larnes & Song Evanssons Lescuera we con Ewen, James, & Sons Faulding, F. H., & Co. Field, J. C. & J., Ltd. Gosnell, John, & Co., Ltd. Harrison, G. W. Gosnell, Jonn, & Co., Ltd.
Harrison, G. W.
Hovenden, R., & Sons, Ltd.
Lescol Perfumery Co.
Pears, A. & F., Ltd.
Price's Patent Candle Co., Ld.
Resinol Chemical Co.
Vinolia Co., Ltd.
Wright, Layman & Umney, Ld

Sodium Bicarbonate

Brunner, Mond & Co., Ltd. Howards & Sons, Ltd.

Sodium Salicylate Read, Holliday & Sons, Ltd.

Soothers Newbery, F., & Sons, Ltd. Schutze, F., & Co., Ltd.

Sparteine Roques, Ferdinand

Spectacles Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Optical
Co., Ltd.

Spermaceti Price's Patent Candle Co. Ld.

Sphygmometers Hicks, James J.

Spices (Ground) Allen, Stafford, & Sons. Ltd. Spirit of Wine

Burrough, J., Ltd. Calder, James, & Co., Ltd. Preston's Liverpool Distillery Co., Ltd. Sponges

Internl.SpongeImporters,Ld. Newbery, F., & Sons, Ltd. Spravs

Benton & Stone, Ltd.
Burge, Warren& Ridgley, Ltd.
Christy, Thos., & Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Parke, Davis & Co.
Sangers Sangers Toogood, Wm., Ltd.

Sprinkler Corks Betts & Co., Ltd.

Spruce Beer Hobson, Joseph, & Son

Starch Mumford, G. S., & Sons Stille

Bennett. Sons & Shears, Ltd Dore, John, & Co. Forshaw, E., & Son, Ltd. Stokes, F. J., Machine Co.

Stoppers Rowe, T. Wilfrid Stipendum Stopper Co.

Strychnine Carnegie Bros.

Surgical Appliances & Dressings

Ances & Dressings
Alen & Hanburys, Ltd.
Bailey, R., & Son
Baiss Bros. & Stevenson, Ltd.
Berton, Arthur, Ltd.
Bursoyne, Burhidges & Co.
Bush, Henry W., & Co., Ltd.
Carnegte Bros.
Christy, Thos., & Co.
Cusson, Gerrard & Co., Ltd.
Calen Mang, Co., Ltd.
Galen Mang, Co., Ltd.
Galen Mang, Co., Ltd.
Galen W., & Son
Glaen Mang, Co., Ltd.
Galen W., & Son
Liverpool Lint Co.
Mason Bros. & Co.
Liverpool Lint Co.
Mason Bros. & Co.
Mason Bros. & Co., Ltd.
Seabury & Johnson
Southall Bros. & Barclay, Ltd.
Thermogene Co., Ltd.
Ven Horn & Sawtell
Ven Horn & Sawtell
Ven Lore & Sawtell
Wood, Vincent
Woolley, J. Sons & Co., Ltd.

Surgical Tubes (Rubber)

Goodrich. B. F., Co.

Suspensories Bailey, W. H., & Sons

Synthetic Prods. Naef, M., & Co.

Syphons Barnett & Foster Camwal, Ltd. Idris & Co., Ltd. Pure Aeration Supply, Ltd. Williams, E., and Co.

Syringes Bresillon, M., & Co. Bush, H. W., & Co., Ltd. Gray & Selby

Syrups, Medicinal Arnfield, J. C., & Co., Ltd. Fellows' Med. Mnfg. Co.

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Tablet Machinery Allen & Hanburys, Ltd. Bennett, Sons & Shears, Ltd. Thompson & Capper, Ltd. Wilkinson, S. W., & Co. Tablets, Compressed

pressed
Allen & Hanburys, Ltd.
British Drug Houses, Ld., The
Brook, Parker & Co., Ltd.
Burreyne, Burbidges & Co.
Cox. A. H., & Co., Ltd.
Driess, Parker & Co., Ltd.
Driess, Parker & Co., Ltd.
Driess, Parker & Co.
EvansSons Leschere & Webh, Ld
Guest, Thos. & Co.
Howards & Sons, Ltd.
Jaokson, Ernest, & Go.
Parke, Davis & Co.
Scheller, Emil, & Co.
Shirley Bros. Ltd.
Thompson & Capper, Ltd.
Thompson & Capper, Ltd.
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"Tabloid" Products RurroughaWellcome & Co.

Talc, Powdered Levermore, Aug., & Co. Tampons.

Bresillon, M., & Co.

Tea Christy, Thos., & Co.

Teats

Ingram, J. G., & Son Terpeneless Oils

Naef, M., & Co. Polak & Schwarz Zimmermann, C., & Co., Ltd.

Theobromin Scheller, Emil, & Co. Smith, T. & H., Ltd.

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Tinfoil Venesta, Ltd.

Tobacco Singleton & Cole, Ltd. Toilet Paper

Ayrton, Saunders & Co., Ltd. Burgoyne, Burbidges & Co. Ford, Shapland & Co. Townsend, J., & Sons

Preparations

Preparations
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Dearborn, Ltd.
Hall Forster & Co., Ltd.
International Chem. Co., Ld.
Little, D. J., Co.
Papier Poudré Ltd.
Quelch, H. C., & Co.
Roswarine Moig. Co.
Stevenson & Howell, Ltd.
Tradon Ltd.
Trinola Ltd.
Trinola Co., Ltd.

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Magnus, Mahee&Reynard Inc. Vanillin

Bush. W. J., & Co., Ltd. Greeff, R. W., & Co., Verona Chemical Co. Zimmermann, C., & Co., L'd,

Vaseline Chesebrough Manfg. Ce.

Vermin-Killers

Normin. Allors
Rowley, S., & Son
Christy, T., & Go.
Cupal, Ltd.
Danysz Virus, Ltd.
EvansSons Lescher& Webb, Ld
Farmer, F., & Co.
Harley, Thomas
Hawker, Arthur E.
Milner's Chemical Cs.

Vet. Instruments Mason Bros. & Chapman Maw, S., Son & Sons

Vet. Remedics Cataline Co.
Cheeebrough Manfg. Ce.
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Day & Sons (Trewe)
Dennis, John W.
Edwards, W., & Son
Harvey & Co. (Dublin), Ltd.
Senier, Alf., & Co.
Tomlinson & Hayward, Ltd.
Wyleys, Ltd.

Vinegar Grimble & Co

Vulcanite Goods Kemp's Vulcanising Co., Ltd

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Newsfrom the Front!

A GRENADIER GUARDSMAN writes:—(1/1/15). "Your Chlorodyne has proved invaluable. There has been a tremendous lot of rain and snow out here, and the trenches have naturally been very wet; but thanks to your preparation I have kept myself and some of my comrades free from colds."—Lance-Sergeant Austin M. Morris, No. 4 Coy., 1st Grenadier Guards, 7th Div. British Expeditionary Force.

Wherever the British Flag is unfurled

FREEMAN'S CHLORODYNE

is found; endorsed by Doctors since 1844.

- THE "GLOBE" NEWSPAPER, 17th Sept., 1914, says:— 'A bottle of this specific should most certainly form part of every soldier's kit."
- THE "WAR OFFICE TIMES," 15th March, 1914, says:—"No one in the Army or Navy who may from time to time be called upon to serve King and Country—it may be in tropical or unhealthy climates—should be without a supply of this health-preserving, health-restoring medicine."
- THE "CHEMIST AND DRUGGIST," 19th Sept., 1914, says:—"FREEMAN'S CHLORODYNE. The great use of Chlorodyne for Campaigners is acknowledged."
- A DOCTOR (W.G.B., J.P., L.R.C.P.E., M.R.C.S., Eng.) writes:—"Freeman's Chlorodyne is a remedy of incalculable value to the Profession and the Public generally."

YOUR (Net P.A.T.A.) PROFIT

On every 4s. 6d.——2s. 9d.——and 1s. 1½d. bottle is 8d. and 2¾d.

Fair, is it not? Then recommend your Customers to send a bottle to their Soldier friends!



To assist your Sales we shall be pleased to send you a supply of Window Cards and Counter Bills, Free of Charge.

FREEMAN'S CHLORODYNE, Ltd., 70 KENNINGTON PARK ROAD, LONDON, S.E., ENGLAND.

CABLES: "Chlorodyne, London."



To the Retail Chemists of the United Kingdom, the Colonies, and all friendly Nations.

THE International Chemical Company have the privilege of announcing that they are now handling all the preparations mentioned below. Each one is a widely advertised line, profitable to sell and certain to give satisfaction to your customers. Full particulars regarding prices and terms of business on application.

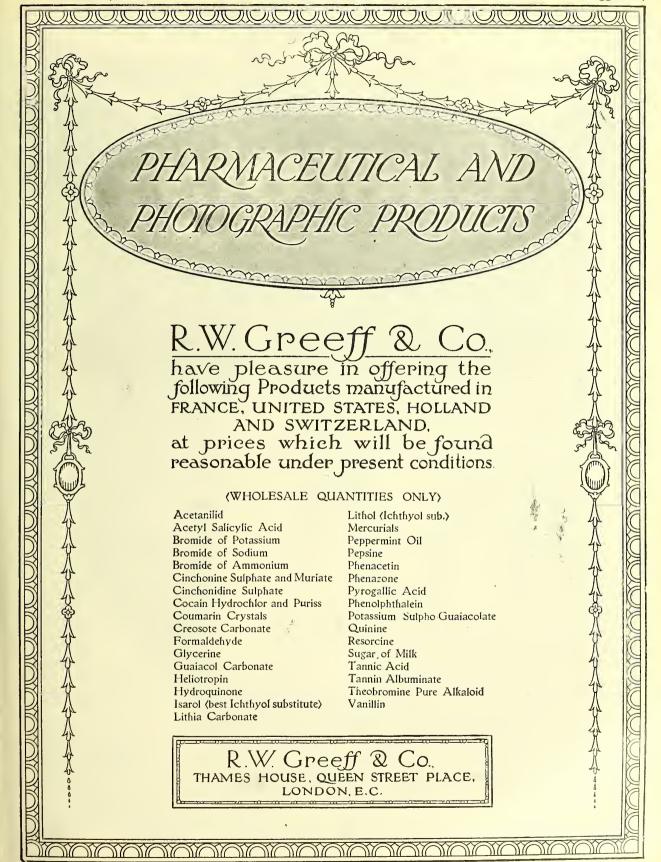
Bisurated Magnesia Lavona de Composee
Bisuroids Salith Leaves
Bitrate of Tar Salrado Compound
Cirola Bark Extract Salrado Tonic Complete

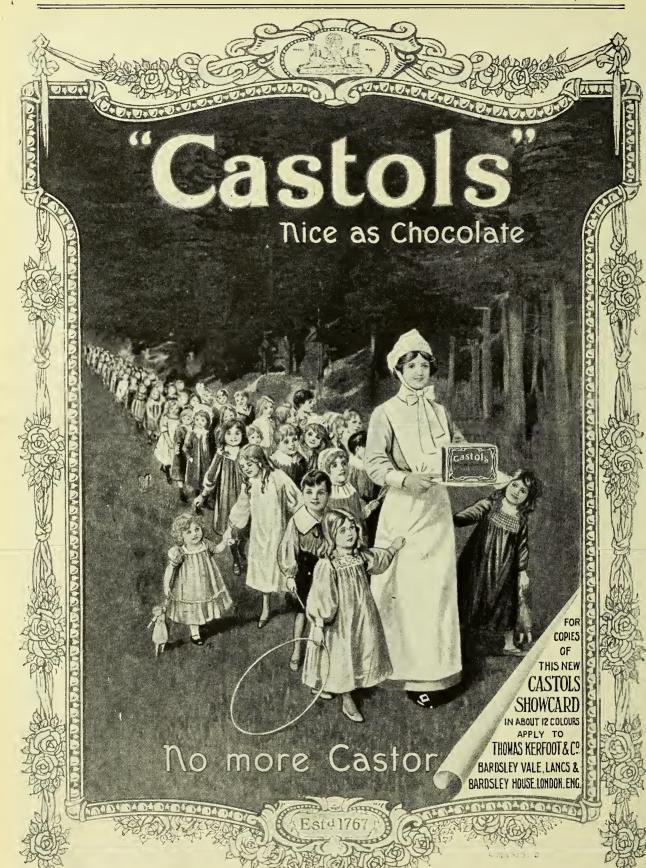
IMPORTANT.

Flowers of Oxzoin Sulthine Concentrate

We already have Distributing Agents for most of these preparations in the following countries: Australia, Canada, Egypt, France, India, Italy, New Zealand, North America, and South Africa. We shall, however, be pleased to hear from any reliable firm of sound financial standing who are prepared to undertake a Distributing Agency for our various lines in countries where we are not already represented.

INTERNATIONAL CHEMICAL COMPANY, LTD. 67/68 Bolsover Street, LONDON, W.





TELEGRAMS: ELEVEN CENT LONDON

S.MAW, SON& SONS 7 to 12. ALDERS GATE ST. elame LONDON, E.C.

TELEPHONE: CITY7 PRIVATE BRANCH **EXCHANCE**

NUMBER 184

APRIL 24, 1915

DOZEN

man Lus endorsemen



Every day sees more adherents to the "Ampoule habit."

"Prevent Septic Infection" is becoming the new rule in workshop and home.

Maw's Tincture of Iodine Ampoules are made for instant application to cuts and wounds, causing immediate sterilisation.

Six in a box. Put up in neat aluminium tubes.



REMARKABLE VALUE IN TOOTH BRUSHES

Twopence farthing each! And a good Tooth Brush for the price. Only by preparing supplies on a scale without precedent can we make such an ASSORTED IN BOX. offer. In ordinary times these Tooth Brushes

would represent good value. The following prices during "war time" are phenomenal.

No. 3027, 30/- GROSS. NOT LESS THAN 1 GROSS, 27/- NET. No. 4036. 40/- GROSS. NOT LESS THAN 1 GROSS, 36 - NET.

LITTLE TALES: 3

Trade Marks were issued as far back as the time of James I., and probably even before that, but it was not until 1875 that the Trade Marks Registration Act was

The Trade Mark of the House of Maw (illustrated inside the triangle at the top of this page) has become recognised by the public as a safe index to perfect quality

Such confidence is worth investigating.

WE are making the usual Per making the usual preparations for the supply of "Summer" Requisites. Holidays may be curtailed somewhat, but the needs of the public will remain.

BATHING Caps, Sponge Bags, and the numerous "etceteras" of the travelling community will soon be featured in "Maw's Page." We shall offer the annual selection of "something better!"

A VERY cheap and effectual Respirator is our pattern at 8/6 dozen. It consists of a light wire frame to fit over the nose and under the chin, and covered with a light woollen washable material.

SANDALWOOD Oil Capsules, in our new metal pocket cases, have proved an instant success. Price 17/6 dozen boxes. An "All-British" production.

CHEMISTS who approach the various private throughout the country will find new busi-ness in the supply of Maw's

Surgical Appliances.



THERMOMETERS

A high-class instrument free from all corrections is our "ALLNOUGHT" EASY SET, certified by the National Physical Laboratory. Magnifying. Each: 30-sec., 7/6; 60-sec., 6/6. It is impossible to obtain a more perfect instrument.

> See also details of our "Easy Set," "Bulbous." and "Tapering" patterns on page 519 of List.

USUAL DISCOUNT OFF ABOVE PRICES EXCEPT WHERE INDICATED.

f Interest to Bread Bakers

High Price Difficulty Solved

use

Wheat Sa

And Reduce your Scaling 2 oz. on each 4lb. loaf.

This means of a turnover of 100 sacks per week

a Saving of £520 a Year.

A further saving of 20 to 25% on your Yeast Bill, and You will also get an Increase of Yield.

We guarantee British Wheat Salts to do all this if used according to our directions.

Specimens of the many unsolicited Testimonials that speak for themselves:

Messrs. The British Wheat Salts Co., Priorsleigh Works, Birmingham.

January 16th, 1914.

"Dear Sirs,—We wrote you yesterday asking you to despatch 3 cwt. of British Wheat Salts, and trust you have been able to have this dispatched. We have now gone carefully into this matter, and we will require a considerable quantity each week. We shall be glad, therefore, if you would despatch immediately half a ton. This of course is extra to the 3 cwt. already on order. We trust you will be able to keep us supplied, as now we have commenced to use this, naturally we would not like to be without supplies, or to run short at any time."

February 16th, 1915.

Among our remittances to-day is one from one of the leading firms in the Kingdom for £333 0s. 6d. This shows how large firms appreciate British Wheat Salts. It is equally interesting to the small baker.

"SIMPLY PULLED OUT OF THE PLACE."

Retford, October 21st, 1914.

"Dear Sirs,—Will you please forward 2 cwt. of British Wheat Salts. I am delighted with the sample cwt. you sent me. If the Trade only knew the value of it as a Bread Improver, you would be simply pulled out of the place for it. Please forward early, as I am nearly without.

Yours faithfully, E. BAMFORTH."

(On Oct. 26th Mr. Bamforth sent a further order for one ton of British Wheat Salts.)

Foreign Wholesale Houses are invited to correspond with

Messrs. MEYER, BRIDGENS & CO., Ltd., 7 Mark Lane, London, E.C.

For Prices and Terms apply-

BRITISH WHEAT SALTS CO.,

Priorsleigh Works.

Moseley Street, Birmingham.

Tel. Address: "Loaves Birmingham."

Telephone: MIDLAND 2591.

Wholesale Agents for London—EGGO LTD., 99 Mansell Street, Aldgate, London, E. Wholesale Agents for Scotland—AITKEN & WRIGHT, Leith. Wholesale Agents for Norwich—MAY & CO., Charing Cross, Norwich. Wholesale Agents for Southampton & Portsmouth—EDWIN JONES & CO., LTD., Southampton.

Depots-LONDON, BRISTOL, CARDIFF, MANCHESTER, LEITH, CLASCOW and BELFAST.

Cream of Tartar Buyers

will welcome

ARTAGRE

Tartacream is not a Cream Powder, nor a substitute for, but really an improvement on Cream of Tartar. (All British.)

It has been submitted to the highest Medical Authorities, and they are unanimous in pronouncing it absolutely perfection. And whereas Cream of Tartar Baking Powders are injurious to health, Tartacream is beneficial in every way.

The response from the Trade has been enormous. Shrewd Wholesale Houses who know the value of a novelty, especially when made by a House "Enjoying a world-wide reputation in the Baking Trade" (to quote the words of the Editor of the "Grocer"), were not slow to take up the article, and with what success!

Read the following extract from an enterprising Wholesale House, dated January 4:

> "We thank you for sending consignment of Tartacream, and will be glad to have a further consignment as early as possible. The orders we have on hand at the moment are 60 1-cwt. casks and 80 28-lb. boxes—i.e., after sending out the ton we have received to-day."

This tells its own story. The Editor of the "Grocer" has seen the original letter, also shoals of orders from Wholesale Houses.

Foreign Wholesale Houses supplying the Baking Trade are invited to correspond with

Messrs. MEYER, BRIDGENS & CO., Ltd., 7 Mark Lane, London, E.C.

For Prices and Terms apply-

THE BRITISH WHEAT SALTS CO.,

Priorsleigh Works,

Moseley Street, Birmingham.

Tel. Address: "LOAVES BIRMINGHAM."

Wholesale Agents for London—EGGO LIMITED, 99 Mansell Street, Aldgate, London, E. Wholesale Agents for Scotland—AITKEN & WRIGHT, Leith. Wholesale Agents for Norwich—MAY & CO., Charing Cross, Norwich. Wholesale Agents for Southampton & Portsmouth—EDWIN JONES & CO., Ltd., Southampton.

Depots-LONDON, BRISTOL, CARDIFF, MANCHESTER, LEITH, CLASCOW and BELFAST.

SUPERIOR to the German-owned Product.

DOCTORS NURSES HOSPITALS **PATIENTS**

after actual comparison with the German article, testify to the better results, better digestibility, and better flavour of the British-owned, British-made

SANAPHOS

SANAPHOS is a phosphated milk product, sharply distinguished from the numerous casein preparations by the fact that fully 80 per cent. of SANAPHOS is rapidly soluble in cold water; and of this 25 per cent, is casein containing also milk albumin, with an organic phosphorus compound showing a total phosphorus content of 0.70 per cent.

The milk basis produces milk again (free from fat) when water is restored to it; and the fluid contains the active enzymes of raw milk, which in the manufacture of ordinary casein preparations are lost. The physiological importance of this fact cannot be over-estimated. It means certain assimilation. A beneficial effect is felt within an hour after SANAPHOS is taken.

_ _ _

It is not only more completely digestible than the German product and its many imitators, it is far superior in flavour. It is accepted and appreciated by the most delicate palate, a fact which greatly enhances its tonic effects.

The Directors of the Company personally guarantee that SANAPHOS is wholly British owned and British made, and all the shares are held by British subjects. The Chairman of the Company is Sir William Taylor, K.C.B., M.D., late Surgeon-General of H.M. Forces.

_ _ _

Sanaphos is obtainable from all Chemists in the United Kingdom in tins at 1/-, 1/6, 2/6 and 5/-, fixed retail prices protected under the P.A.T.A., and in bottles on special terms for export. It is being widely advertised. Supplies of reprints of testimonials and other advertising matter can be obtained by any Chemist stocking Sanaphos.

Write for the reprints of scores of enthusiastic testimonials, corroborating the Makers' claims, from Doctors, Nurses, Hospitals and Patients-

THE BRITISH MILK PRODUCTS CO., Ltd.

69 MARK LANE, LONDON, E.C.

GLYCERO-

of LIME, IRON, SODA, POTASH,&c.

answering severest tests.

Pure Milk Casein, with Glycerophosphates.

Identical in composition and in all respects the same as the German product Sanatogen,

Tins same weights as Sanatogen

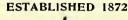
7/=, 11/=, 18/-, 30/= dozen.

> BROMIDES AMMONIUM, POTASSIUM.

> > SODIUM.

ACETOPIRIN or

ASPIRIN. Bottles of 25's and 100's.



Cable Address : "SELGOG LONDON,"



Telephone: 362

LONDON WALL.

TRADE MARK.

JOHN LORIMER

Manufacturing Chemist,

119 Finsbury Pavement, London, E.C.

Founder of Lorimer & Co., 1872, Retired from it, 1903. Not connected with any other Firm or Company using the name of "LORIMER."

Selling Agent for The English Drug & Chemical Works, Ltd. ALL BRITISH PRODUCTS EXCEPT BROMIDES.

The Finest on the Market. in pure tin tubes, Ribbon opening.

4½ × i ln. 48/• gross

This perfume appeals strongly to all patriotic Britons, especially to Ladles.

EAU DE BOLOGNE

Greatly appreciated in Milltary Hospitals. 2 & 4-oz. bots. 7/6, 13/- doz. Sells readily.

ALL= BRITISH

In bottles with Measures.

4 8 16 oz. 1 gall. 4/- 6/6 11/- 4/3 each

Special Prices to Wholesale Buyers.

METOL SALOL BARBITONUM AMIDOL

A pure Cresol preparation and contains 50 per cent. of Cresylic Acid.

perfectly neutral and soluble.

No Travellers employed. Only terms-net cash in London.

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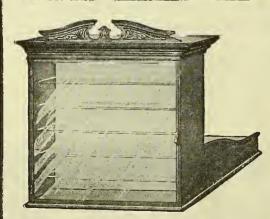
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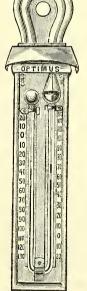
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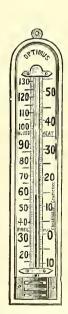














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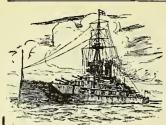
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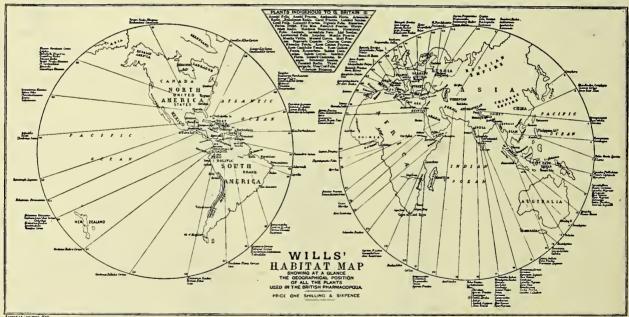
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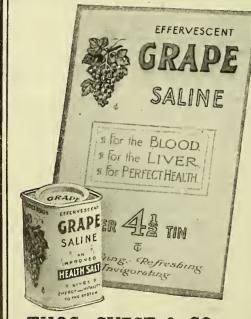


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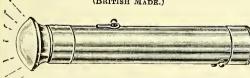
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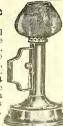
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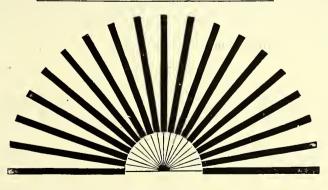
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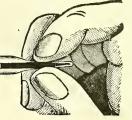
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BROAD INDEX. Easy to Read.

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This Thermometer is specially suited for Family use. The one degree between 98° and 99° being marked "Healthy Temperature," indicating that no danger need be feared between these points. Below 99° the figures and divisions are marked in Black; at 96° it is marked "Too Low" Above 99° the figures and divisions are marked in Red showing slight fever; at 101° marked "Feverish,' and at 104° "High Fever." The marking of this Thermometer shows the condition of the patient at a glance. Just the Clinical for Home use. It also has an EXTR BROAD index, making it easy to read, and flat sides to prevent rolling.

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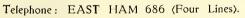
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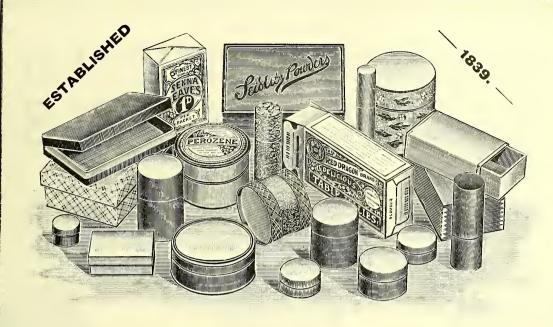
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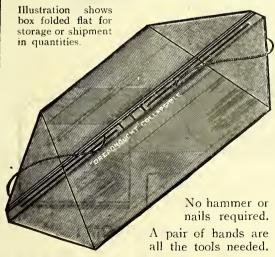
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A DISINFECTANT, non-caustic, perfectly soluble with water, forming a milky, opalescent mixture which remains without separation. Carbolic Acid, on the contrary, sinks to the bottom and thus exerts but a limited effect.

"Zinyl" contains 16/17% of Tar Acids; much of the "cheap" rubbish sold does not contain 3%.

"ZINYL" ("Eklips" Brand) is claimed to be one of the best and cheapest Disinfectants and Germicides on the market, and yields a good profit to the seller.

1/9 per Gallon, 200 Gallons 1/7; 500 Gallons 1/6 per Gallon, NET.

40-gallon casks free. 5-gallon drums 4/- each. 10-gallon drums 7/6 each.

Synthetic Otto of Rose.

13/6 per oz.

"ZINYL" BRAND (Regd.)

This is an actual synthetic product, not a mere mixture of essential oils, replacing Bulgarian and French rose products, since it has the characteristics of both.

The "ZINYL" Brand passes the most discriminating tests, even the test of taste. It has the sweet honey-like taste and odour of genuine otto, and is much stronger, yet costs a fraction of the price.

A single trial will prove convincing, and comparison is invited with other leading Brands.

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Packed in Blue Flats, shived, capsuled and labelled.

No. 3 Quality 2 in 4 oz., 4/-; 3 in 6 oz., 5/6; 4 in 8 oz., 6/3; 6 in 12 oz., 8/6 per doz.

Packed in White Glass Kalis, shived, capsuled and labelled.

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Packed in Second Quality Plug

Stoppered Cheltenhams,
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Effervescent Saline.

Best Quality.

Packed in Wood's Plug-Stoppered Cheltenhams, labelled.

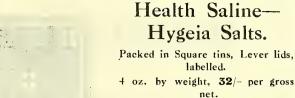
4 oz. f.c., 6/3; 6 oz. f.c., 7/9; 8 oz., f.c., 9/9 per doz.

Packed in Second Quality Plug-Stoppered Cheltenhams.

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 $4\frac{1}{2}$ oz. by weight, 34/- per gross net.

10 oz. by weight, 62/- per gross net.

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Cartoned, 8/6 doz.

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Packed in boxes, 12 charges in each box.

3 pint size, 20/- 5 pint size, 27/6 8 pint size, 40/- per doz.

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Packed in Wood's Flug-Stoppered Cheltenhams,

Capsuled and labelled.

6 oz. f.c., 8/- 8 oz., f.c., 10/per doz.

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Loose, 6/9 Extra Strong, 8/Double Strength, 9/6 per gross.
Boxed 12 in box, Best Quality

boxed 12 in box, Best Quality boxes, 7/9 dozen boxes. Boxed 12 in box, Second Quality

boxes, 7/3 dozen boxes.

Banded, 7/9 per gross

In Envelopes, 8/- per gross.

Liquid Paraffin.

Packed in White Glass Panelled Flats,

Corked, leather-capped, labelled. 4 oz., 5/9; 6 oz., 8/-; 8 oz., 11/6; 12 oz., 14/9; 16 oz., 20/-; 20 oz., 26/6 per doz.



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IMPORTANT TO PERFUMERS.

WHITE, PALE & GREEN MINERAL OIL

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ACHIEVES ANOTHER TRIUMPH.

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TOOTH PASTI	Cherry, Areca Nut, White Rose, Thymol, &c.	2/9	3/3	5/9 ,,
Two Special Lines great Formalin & Mint, and Thym Other Tooth Pastes can be packed each the small size, and 6d. for the large.			3/6	6/6 ,,
matter to what climate they may be	ed to keep in the condition sent out, no shipped. This is of great importance the market go hard, especially when rantee ours in every particular.			
Zinc Carb Resin	cic, B.P		2/3 2/9 2/6 2/9 2/9 2/3	3/3 ,, 4/- ,, 3/6 ,, 4/- ,, 4/- ,, 3/3 ,,
Packing in tubes is the most hygienic required is squeezed out on the wound or on in contact with the fingers at all. Packed in	form for Ointments, as just the quantity to the lint, without the remainder coming hanging folding boxes to prevent crushing.			•

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Buyer's own name can be affixed to the labels.

Special recipes prepared, also arrangements made for packing in large quantities any preparation for houses not used to tube work, which requires skilled labour.

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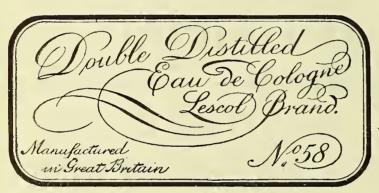
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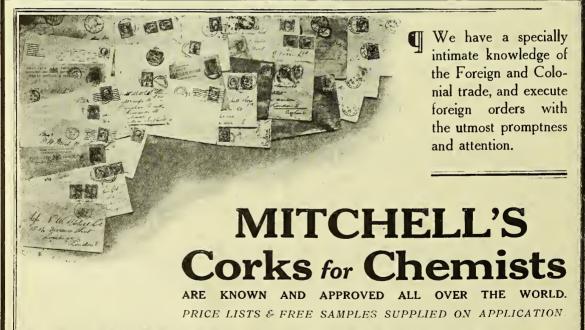
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Any quantity sent carr. paid in the United Kingdom with Sparklets or Flasks.

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CLEW'S RADIUM LUMINOUS PAINT.

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For Clocks, Watches, Compasses, from 5/- per grain.
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A new and wonderful discovery for the rejuvenation and preservation of the Hair.

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IT is made from the fruits of the Palm and Pine Trees, and its germicidal value is equal to that of a Soap containing 20% Carbolic Acid, but it will not injure the most sensitive skin.

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Methylated Spirit White free y

White in colour & exceptionally free from unpleasantness.

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6d. size	 4/6 per doz.
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Lavender 48 /-1	per gross.
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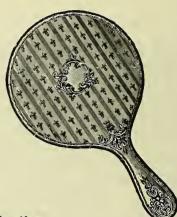
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A concentrated combination of the choicest flowers, aromatic herbs and roots, with the rare spices and gums of Arabia. "Petal Dust" has been the favourite perfume of all classes for over half a century and still commands the largest sale of any dried perfume in the world.

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Keep Hot things Hot - 30 Hours.

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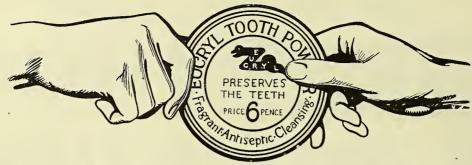
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BATH AND FLESH GLOVES.

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Loofah	both sides		•••	•••		8/6	Turco	white,					2/3
,,		turcok	ooun	d		10/6		,,	thick	thick			3/3 5/-
99	and turco		•••	•••			Fancy	stripe					,
***	and fancy			•••		7/6		two p					
99	and calef	acio	•••	•••	•••	7/6	,,	blue a	na rec	anago	nai sq	uares	-4-/-

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TERMS DURING APRIL ONLY Large 6d. size: 3/6 per doz., 39/- per gross Assorted Small 3d. size: 1/9, , , 19/6, , , , desired.

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For 5s. 3d.

We will send Carriage Paid With Artistic 13-6d. and 13-1s. size Showcards.



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Established 1833

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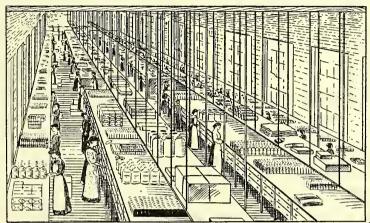
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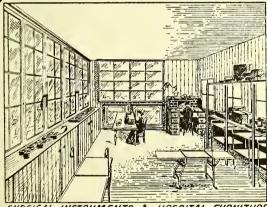
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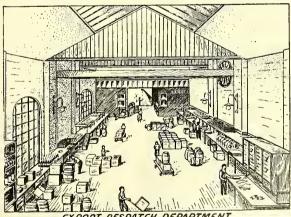
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40%
MINIMUM
PROFIT

JOHN BOND'S "CRYSTAL PALACE" MARKING INK.

With or without heating, whichever kind is preferred.
Please specify when ordering.

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As supplied to the Royal Households, and awarded forty-five Gold Medals, etc.
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PRESTON'S LIVERPOOL DISTILLERY C., L.

The Largest Makers in the Kingdom.

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Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling perfume in the market. Retail Prices ... 1/-,1/9, 3/6, 6/-, 7/6, 10/6, per Bottle,

ALSO 3d. SAMPLE BOTTLES.

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is the ONLY LARD

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This cream is advertised in a novel manner, and very extensively. The public will want it, and it is bad business to send a customer to a rival shop for anything.

The profit on the retail sale is worth having—and you keep your customer.

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In 6d. and 10½d. tubes.



These lines are both ready sellers and yield a hand-some profit to the Pharmacist.



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THE NIT KILLER CLEANS CHILDREN'S HEADS.



Extracts from some of the many letters we have received:— Cornwall: "RAILOX is the best I have used."

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Winchester: "Please send 2/worth of Railox. Mother said she would not be without it." Shipsea, Hall: "Delighted with the result.

A new invention, used dry, cannot be seen on the hair, and is very effective. It is non-poisonous and will not injure the most tender scalp,

RAILOX IS SPECIALLY SUITABLE FOR EXPORT. CANNOT BREAK, MELT OR LOSE ITS STRENGTH.

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6 doz. 7/-

Carr. Paid.

Discount-2 gross, 21%.

13 to the doz. for cash with order.

5 gross, 5%.

10 gross, 7 %

d.

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Cleaner for Straw Hats

Easily used.

Gives complete satisfaction.

3 doz. with foll-size Sp cimen Hat, 4/- 6 doz. 7/-Carriage Paid. 13 to the doz. cash with order. 12 doz. 13/-

Discount-2 gros , 22%.

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"My customers speak highly of it."

We could print pages of testimonials.

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Leather Cappings

Nos. 0, 1, 2, 3, 3b, 10, 20, 30 for Phials 4d, per gross, 4, 4b, 40 for 3 to 6 oz. Bottles ... 4½d. ... 39 for Winchester Quarts ... 7d. ... 39, 5, 5b, 5½, 50 for 8 to 10 oz. Bottles 5d. ... 9d, Long for Wines... 9d,

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ELASTIC BANDS: Small, 3d. per gross; Large, 4d. per gross.

Also MANUFACTURERS of DISH and DESSERT PAPERS, HAM FRILLS, PIE COLLARS, SOUFFLET CASES, &c. &c.

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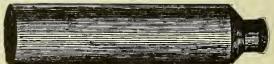




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takers of Collapsible Tubes and Filling Machines for same. Patentees of Sprinkler and other Stoppers for Perfumes, Washes, &c. Screw Caps.

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seine and their Prices.

Specialities

Yellow.

PI	MI	YY '	TINS					7 /- p	er gross.
T	WO	PEI	YNN '	LIN	S	•••		13/-	,,
2	No.	1 si	ize, in l	boxe	s of 1 a	gross lozen	• • •	18/6	22
Jes	,,	1	,, ,	,	3 d	lozen	• • •	18/9	,,
<u>=</u>	,,,	2	",	,	1	"			-,",
Co.	Haps	able	tubes,	No.	1 size,	2/6.	No.	2 size,	5 /- doz.
N	o. 1	size	, bottle	, in	cardbo	ard case			per doz.
٠,	, 2	,,	,, ,		,,	,,		5/-	
춫-	lb. t	tins,	round			•••		6/3	,,
ī	,,	97	square	•••	•••	•••		10/6	21
5		,,	,,	•••		•••		32/~	
10		,,	,,	• • •		•••			per tin.
25		,,	,,	•••					,,
50	,,	,,	,,	• • •	• • •	•••	•••	25/-	,,

White.

Twopenny Tins (three doz. in	box)		13/6 p	er gross.
Collapsible tubes, No. 1 size	•••			per doz.
7, 7, 1, 1, 1, 2, 1,			5/3	,,
Blue Seal, in bottle, carton	•••	• • •	3/6	,,
No. 1, 3-oz. size, in cartons	•••		6/-	,,
,, 2, 6-oz. ,,		•••	10/-	,,
½-lb. tins, round			10/-	,,
$\tilde{1}$,, ,, square ,,			17/-	,,
5 ,, ,, ,, ,,			60/-	11
10			9/6	per tin.
25			001	*
	• • •			,,
50 ,, ,, ,, ,,	•••	•••	44/~	• •

Red or Veterinary.

						J
		s, round	•••		•••	4/- per doz.
1 ,,	,,	square	• • •	•••		6/8 ,,
	,,	,,	• • •	•••	• • •	22/- ,,
10 ,,		,,	•••	•••	• • •	3/6 per tin.
25 ,,	,,	,,		•••		7/6 ,,
50 ,,	,,	11	•••	•••	•••	13/4 ,,
Half-l	oarr	els, about	1½ cwt.	•••	•••	28/- per cwt.
Barre	ls, a	bout 3 cw	t	•••	•••	24/6 ,,

Carbolated-Veterinary.

1-lb.	tins		 		•••	7/-	per	doz.
5 ,,	,,	• • •	 •••	• • •	•••	2/-	per	tın.
1.0 ,,	,,		 • • •	•••	•••	3/8	,,	,,

Sulpho for Dogs.

In jars	•••			•••	9/3 per doz.
In 5-lb. tins	•••	•••	•••	•••	4/8 each.
10-lb. tins	•••	***	•••	•••	8/- each.

White Liquid Petroleum.

No. 0 size bottle			8/3 per doz
,, 1 ,,			16/6 ,,
,, 2 ,,			24/9 ,,
Analgic		9/- p	er doz. tubes. 🚆
Borated		4/6, 7/6	er doz. tubes.
Camphora	ted	5/-, 7/6	tubes,
Capsicum	•••	5/7, 9/-	tubes, Including
Carbolate	d	4/3, 7/6	ding G
Menthola	ted	5/7, 9/-	Government
Oxide of	Zinc	5/ 7, 9/-	nent S

Perfumed White.

Coll	apsible Tubes				4/3	
No.	1 (bottle in carton))	•••	•••	8/3	per doz.
				ton,		-
	with glass stoppers	S	•••		12/6	"

Hair Tonic.

							8/9 per	
,,	2	,,	•••	•••	• • •	•••	 17/6 ,	,

Pomade.

ea	No.	1:	size,	in	boxes	of 1	gross			er gross.
es	,,	1	,,		,,	3	dozen		20/6	,,
콞	,,	2	,,		,,	1	, ,		62/-	,,
Col	lapsil	ble	Tul	es.					2/9	per doz.
No.	$1 \sin$	ze,	bott	le,	in car	dboa	rd case		3/10	,,
,,	2 ,	,	,,			,,	,,	• • •	7/9	"
Ŵh	ite a	nd	Qui	$_{ m nin}$	c Pon	ade	,,	•••	8/3	,,
			-							

Perfumed Oil.

One size. in bottles (for the Hair) 6/9 per doz.

"Vaseline" Soaps.

UNSCENTED.

3d. tablets, boxes of $\frac{1}{2}$ doz. tablets, 27/- per gross tablets. PERFUMED.

3d. tablets, boxes of $\frac{1}{2}$ doz. tablets, 27/- per gross tablets. SUPERFINE.

Delicately perfumed, box of 3 tablets, 5/- per doz. tablets. TAR.

3d. tablets, boxes of 6 tablets ... 27/- per gross tablets-

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One solution, nine shades.

A first-class article with an excellent demand, created entirely on its own merits, and carrying a first-class profit.

Size.	Min	imum ret	ail.	Minimum wholesale.		
1/~	•••	1/-		7/6)		
1/6	•••	1/6		9/- [pe	er doz.	
2/6	•••	2/3	•••		BCount	
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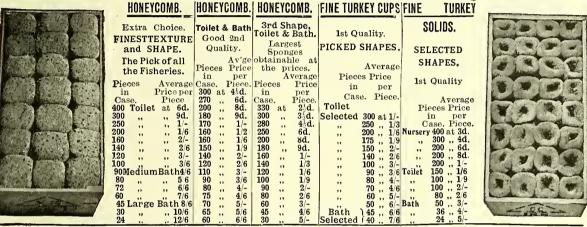
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FOR ALL PURPOSES

PALATINOIDS.

A SCIENTIFIC FORM OF MEDICAMENT.

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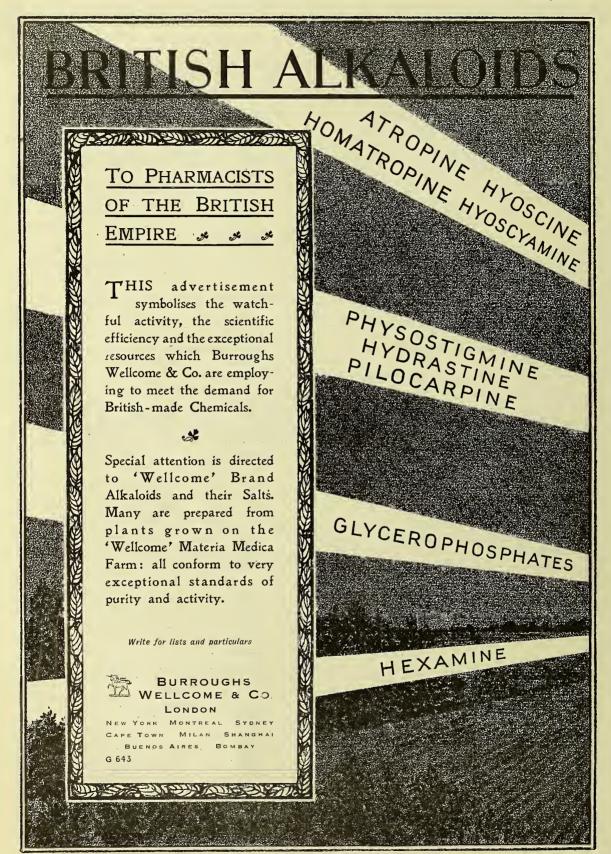
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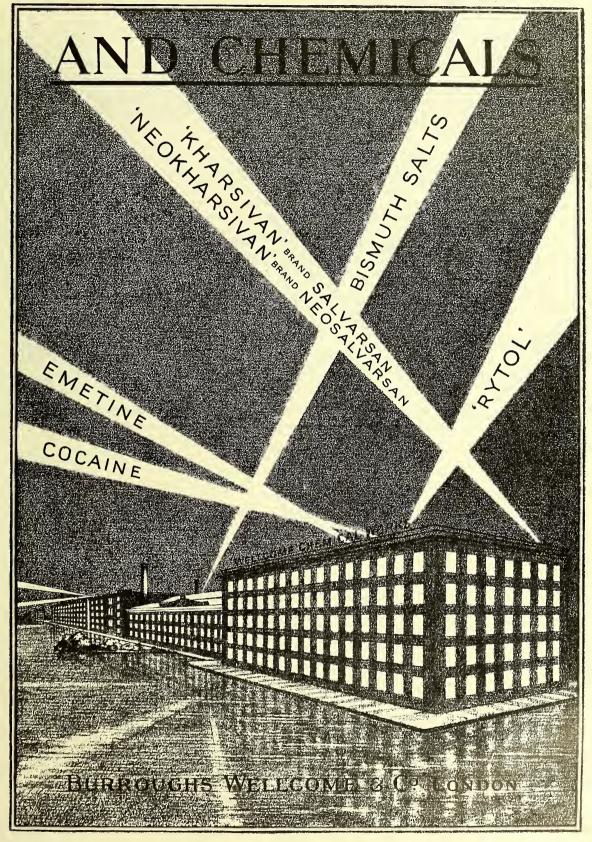
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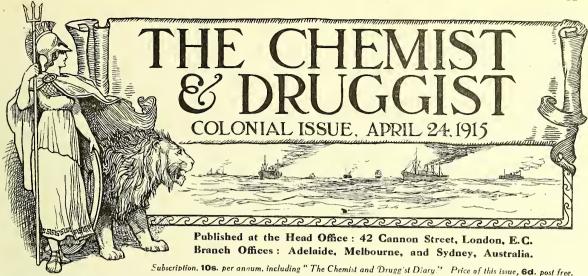
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Emollient. It with carton to JBES.

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New World Markets.

Nobody in the British Empire acts more earnestly upon the injunction "Business as usual during the European War" than those associated in the production of THE CHEMIST AND DRUGGIST. The present issue is proof of the statement, and more is forthcoming in the shape of a New World Issue, to be published in the week ending May 22. The very first issue of The Chemist and Druggist embraced the American continents in its universal circulation; indeed, the New World was the first place to be visited on business by the originator of the C. & D. after it was inaugurated. The result was an initial circulation which has grown like Transatlantic trade. Later an annual issue specially devoted to extending trade and fostering business relations between the Old World and the New was started, and it is the 1915 number that will be published on May 22. Wo hope all business houses at home will take advantage of the publicity offered by this number, and give our Publisher early instructions.

Summary.

Subscribers are advised to read this column first.

An interesting interview with a French pharmacist "at the Front" is reported on pp. 101-2.

Mr. Lloyd George is considering what can be done in regard to duty-paid spirits used in compounding medicines (p. 103).

The first case in which a panel chemist has been sued by an insured person in respect to a prescription dispensed is reported on pp. 104-5.

Schimmel & Co. make some strange remarks about German trade in their "Bericht," which is referred to in our Coloured Supplement.

The expired patents dealt with in this issue are those for sidonal, somatose, sublamine, tannalbin, tannigen, tannobromin, and tannopin (p. 92).

We have received official assurance in regard to the sale of methylated preparations by chemists who are not licensed to retail methylated spirit. See p. 113.

The supply of raw materials in the nature of drugs is receiving the attention of the Imperial Institute, and we print notes of an interview on the subject (pp. 87-89).

Mr. J. Tarton, Manchester, wins this month's Corner for Students prize as well as the Tournament one. Mr. A. E. Bull, Hunstanton, and Mr. E. A. Onyon, Eye, are other prizewinners (pp. 82-83).

The London County Panel Committee has prepared an extraordinary statement regarding chemists' profits to present to the Drug Tariff Departmental Committee (p. 114). We comment upon it on p. ¹11.

A report of the British Science Guild on the supply of glass for technical purposes states that there is available in this country sufficient optical glass for Service instruments, but that glass for photographic and microscopic lenses is required. The Institute of Chemistry publishes important formulas for technical glass (p. 90).

Although business is quieter, the undertone is good. Acetic acid, antimony, balsam Peru, cajuput oil, potash bichromate and caustic, salol, caustic soda, and sal ammoniac are dearer. Refined camphor, tartaric and oxalic acid, gingers, bergamot oil, and ammonia sulphate are firmer. Milk-sugar, belladonna-leaves, cod-liver oil, tallow, and lemon oil c.i.f. have moved in buyers' favour (p. 123).

It is not possible to summarise each of the items of important news included in this Colonial Issue. In spite of the war, British trade is well maintained, a statement which applies with special force to business with the Colonies, Dominions, and India (see the article beginning on p. 111) The purpose of this issue is to extend the business, and we ask all who receive the issue to study quietly tho advertisements and all other trade matters in it.

Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed Corner for Students, "The Chemist and Druggist," 4z Cannon Street, London, E.C.

QUALITATIVE ANALYSIS FOR JUNIOR STUDENTS.

MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopæia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, marked "Corner for Students" on the top left-hand corner) will be received up to Tuesday, April 27, on which

day the samples will be posted.
Students' reports will be received up to Saturday, Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

Special Notice.—The prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, which fact must be attested on their reports. Others may obtain specimens of the mixture of salts, and their reports will be separately adjudicated, but they will be regarded as hors concours. Correspondents who do not state that they are preparing for a qualifying examination will be included in the latter list.

Report on April Analytical Exercise.

The powder distributed to students on March 23 consisted of equal parts by weight of sodium chloride, sodium sulphate, and disodium hydrogen phosphate. The calculated composition of such a mixture is:

Na	 	 	 22.2
	 	 	20.2
SO, PO,	 	 	9.9
		 	8.8
H	•••	 •••.	0.1
H_2O	 	 	 38.8

The powder also contained, as impurity, a small quantity of magnesium.

100.0

Samples of the powder were distributed to twentyseven students, and, in response, thirteen reports were sent in for examination. The writers of all of these reports were successful in detecting sodium and chlorine, but one failed to detect the phosphoric-acid radical and three the sulphuric-acid radical, while one did not observe the copious evolution of water when the powder was heated in a dry test-tube. Only two students detected

the presence of the trace of magnesium.

This exercise was designed to furnish a comparatively simple example in analysis, and most of our correspondents experienced little difficulty in dealing with its chief constituents. Nevertheless, several errors were met with in common in a number of reports, and some reference to these may be useful. In the first place, the powder was described in almost every instance as completely soluble in water. The greater portion of it did, indeed, dissolve readily in water, but a slight turbidity remained, which disappeared on the addition of a few drops of dilute hydrochloric acid. This turbidity was due to magnesium phosphate, produced by the interaction of the trace of a magnesium salt present with a corresponding quantity of sodium phosphate, and the two students who observed it succeeded in correctly ascertaining its nature, close observation having directed their attention to a circumstance which required explanation.

Another matter which gave rise to error was the testing for the sulphuric-acid radical. Although this radical

was present to the extent of almost 10 per cent., it was missed entirely by three students, while several others reported it, not very accurately, as a trace. In carrying out a test which involves the precipitation of a substance that is even so sparingly soluble in water and dilute acids as barium sulphate, certain precautions must be observed in dealing with solutions in which the radical to be tested for may be present in relatively small quantity. From dilute solutions, barium sulphate only separates somewhat slowly, and hence a liquid to which barium chloride has been added should be permitted to stand for at least five minutes if a precipitate does not appear immediately, or very nearly so, in order to make certain that the slowness of precipitation does not lead to an incorrect conclusion. Again, although very sparingly soluble in dilute acids, the solubility of barium sulphate in dilute hydrochloric or dilute nitric acid is not altogether negligible, and is greater in the case of the latter acid than of the former. Hence the solution to be tested should be but slightly acidified, and preferably with dilute hydrochloric acid.

When the powder was gently heated with concentrated sulphuric acid, hydrochloric-acid gas was freely evolved. The pungent nature of this gas led several students to report the evolution of sulphur dioxide. This is a very common mistake, and one against which students require to be on their guard. Only the familiarity obtainable by frequent comparison will enable the student to distinguish sulphur dioxide, by its characteristic pungency and taste, from hydrochloric-acid gas and some other pungent gases. Of course, the possibility of both sulphur dioxide and hydrochloric acid being evolved simultaneously must be kept in view, and both gases must be suitably tested

for when occasion demands this.

Potassium was very commonly reported present, and the evidence, in almost every case, was exclusively that of the flame-test with the use of blue glass to cut off the coloration due to the sodium. The reports of a "crimson" flame-coloration seen through blue glass, and alleged to be due to potassium, were so numerous that we made special efforts to detect traces of potassium, but these were unsuccessful. When the blue glass was of sufficient intensity of colour to cut off the sodium flame completely no coloration due to potassium was discernible, and other tests for potassium likewise yielded negative results.

Constituents not already mentioned which were also reported present in the powder, but which were not really present, included ammonium, and the carbonic, nitric, tartaric, and citric acid radicals. The fact that these constituents were reported present will, no doubt, cause some surprise to students whose analytical operations ought to have revealed their presence, but did not yield

any positive indications.

PRIZES.

The First Prize for the best analysis has been awarded to J. Turton, c/o Manchester College of Pharmacy, 225 Oxford Road, Manchester.

Oxford Road, Manchester.

The Second Prize has been awarded to
ALLAN E. BULL, c/o W. H. Lenton, Hunstanton, Norfolk.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about

five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

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						1010.		0.0
J. Turton	(1st	prize)		97	Nux			86
A. E. Bull	(2nd	prize)		96	Wesleyan			86
				87	В. Ј. Н.			68
D. S. A.					B. K. U.		• • •	64
Experiri					R. G. M.		•••	59
Ignoramus					H. T. Hal	1	•••	56
Onvx				86				

TO CORRESPONDENTS.

CANTIUM.—We could not obtain any reaction on applying the sodium bismuth thiosulphate test for potassium. The sulphuric-acid radical present was more than a trace.

D. S. A.—When the coloration imparted by the powder than the black of the street of the supervisor of the street of t

to the bunsen flame was observed through blue glass of

sufficient intensity to cut off the sodium flame completely,

sufficient intensity to cut off the sodium fiame completely, there was no purple colour discernible.

Experim.—Since you appear to have looked specially for the evolution of volatile substances when the powder was heated in a dry tube, it is rather remarkable that you failed to observe the water which was given off to the extent of nearly 40 per cent. of the weight of the powder. You assert that only chlorine was evolved when the powder was heated with manageness disvide and sulphuric acid but was heated with manganese dioxide and sulphuric acid, but

was heated with manganese dioxide and sulphuric acid, but you offer no evidence to support this.

Ignoramus.—Besides proving the presence of the acid radicals you detected, you should have shown that others were absent. The gas which you took to be sulphur dioxide was really hydrochloric acid.

Onyx.—The precipitate which you got with calcium chloride when testing for acid radicals, and which you found to be insoluble in hydrochloric acid, consisted, as you supposed of calcium sulphate; but note that this substance posed, of calcium sulphate; but note that this substance dissolves to a considerable extent in hydrochloric acid, especially when the latter is hot and moderately concen-

Nux.—You detected the phosphoric-acid radical in the powder, which you reported to be soluble in water. Assuming that your observation as to solubility in water was

ing that your observation as to solubility in water was strictly accurate, your separation of the phosphoric-acid radical by the ammonium acetate and ferric chloride method was wholly needless. Read the general remarks above.

Wesleyan.—It is not correct procedure to heat a substance on charcoal with sodium carbonate and potassium nitrate: we are in doubt as to whether you mentioned charcoal instead of a platinum wire, or potassium nitrate instead of potassium cyanide. Note that the formation of a white precipitate with silver nitrate did not prove the absence of an arsenate upless the silver nitrate was added absence of an arsenate unless the silver nitrate was added in excess to a neutral or nearly neutral solution. The white precipitate consisted of silver chloride, and until the whole of the chlorine present had been precipitated in this form, silver arsenate would not be precipitated. As a matter of fact, the addition of silver nitrate in the present case gave first a white precipitate of silver chloride and afterwards a

yellow precipitate of silver chloride and afterwards a yellow precipitate of silver phosphate.

B. J. H.—The gas given off on heating the powder with sulphuric acid was hydrochloric acid and not chlorine, and it did not bleach litmus-paper. Read also the reply to "D. S. A."

B. K. U.—You describe silver chloride, perhaps inadvertently, as soluble in a franches the contraction of the contraction of the contraction of the contraction of the chloride.

remarks as to testing for sulphates.
R. G. M.—The precipitate which you mistook for calcium citrate was really calcium phosphate with, perhaps, a little

calcium sulphate.

H. T. Hall.—The behaviour of the powder on heating bore very little resemblance to that of a tartrate or a citrate, and the characteristic odour of the evolved volatile matters was wholly absent. We were unable to obtain the reactions for a nitrate which you describe.

THE ANALYTICAL TOURNAMENT.

The special prizes offered in October last for the highest aggregate marks awarded for reports on the six succeeding monthly exercises, although no fewer than fifty-one students participated in the analyses, have not called forth on this occasion the keen competition of previous winter sessions in consequence of causes arising from the war. During the course of the winter the whole of those correspondents who entered upon the competition, save one, cut themselves off from any possibility of winning a tournament prize through failing on at least one occasion to send in any report. This is much to be regretted, since several students began by taking promising positions in November and December, and there was a prospect of their being able to maintain these positions until the close of the contest.

The result is that the first prize of books, to the value of 2l. 2s. with a certificate, falls to "Fraises," Mr. J. Turton, c/o Manchester College of Pharmacy, 225 Oxford Road, Manchester, who attained what cannot be regarded otherwise than as a very satisfactory aggregate of 513, made up, with some fluctuations, of 84, 73, 95, 71, 93, and 97. We have to congratulate this student on the result of the tenacity which he displayed in persevering through-

out the competition.

In consequence of circumstances detailed above, the second and third tournament prizes are not awarded, no other competitors having fulfilled the stipulated condition of sending in reports on all six exercises. view, however, of a meritorious record, with only a

failure to send in a report on a single occasion, we have decided to make a special award of Wootton's "Chronicles of Pharmacy" for perseverance, and progress, to "Onyx," Mr. E. A. Onyon, Eye, Suffolk, whose aggregate for five reports is 383, made up of 68, 81, 62, 86, and 86.

New Books.

Any book published in the United Kingdom can be supplied to our subscribers at the price quoted. Orders, with remittance, should be sent to the Publisher, 42 Cannon Street, London, E.C.

Key to the London Telephone Directory. 9\(^2_8\times 7\(^3_8\). Pp. 130. 2s. net. (Stone & Colquhoun, 92 Victoria Street, London, S.W.) [The Key forms a direct method of finding out the name and address of a telephone subscriber when only the telephone number is known. The utility of the volume will be at once recognised by anyone who has realised the hopelessness of a search through the telephone directory.]

Lewkowitsch, J. Chemical Technology and Analysis of Oils, Fats, and Waxes. Edited by G. H. Warburton. Vol. III. 5th edit. $8\frac{3}{4} \times 5\frac{3}{4}$. Pp. viii+483. 20s. net. (Macmillan & Co., Ltd.) [Dr. Lewkowitsch's publication on oils and fats has acquired a reputation for the thorough manner in which the whole field of the technology and analysis is covered. The present volume is the fifth edition of Volume III. and has been prepared for the wreet by Ms. of Volume III, and has been prepared for the press by Mr. Warburton. The volume is divided into two chapters, the Warburton. The volume is divided into two chapters one dealing with the technology of manufactured oils, and waxes-technical and commercial examination of the and waxes technical and commercial examination of the products of the oil, fat, and wax industries—and the other the technology of waste oils, fats, and waxes, and the commercial products derived therefrom. The subjects included in the first chapter comprise edible oils and fats, burningoils, paint oils, lubricating-oils, wood oils, emulsified oils, hydrogenated oils, iodised oils, polymerised oils, boiled oils, oxidised oils, etc.; while the industries based on the saponification of oils and fats include candle-making, soapmanufacture, and glycerin-manufacture. It will be seen that this volume covers many subjects of particular interest to pharmacists, and that it forms one of the most important to pharmacists, and that it forms one of the most important of Dr. Lewkowitsch's works.

Society of Chemical Industry.

Edinburgh and East of Scotland Section.

THIS new Section was inaugurated on Wednesday, April 14, the meeting being held in the University New Buildings, with the President of the Society (Professor G. G. Henderson) in the chair. After adopting

by-laws, Professor J. Walker, F.R.S., was elected Chairman, Mr. D. B. Dott Vice-Chairman, and Dr. J. P. Longstaff Hon. Secretary of the Section. The President delivered a brief address, in the course of which he expressed the opinion that there must be in the laboratory note-books of many works - chemists material for valuable papers, which might be published with-



PROFESSOR J. WALKER.

out detriment to the manufacturers concerned. He also stated that at the next annual meeting of the Society they were to try the experiment of more serious business and less of the picnic element. Professor Walker, in returning thanks, admitted that in the past they had not laid stress on special training for industrial chemists. at the same time letting it be known that the defect is in course of being remedied. The meeting extended a cordial invitation to the Council of the Society to hold the annual meeting in Edinburgh in 1916, the motion being made by the Chairman of the Section and seconded by the Vice-Chairman, Mr. Dott remarking that the Society might follow the good example of the British Pharmaceutical Conference by devoting a fair proportion of the time at its annual gatherings to scientific discussion.

European War.

Pharmaceutical Roll of Honour.

Non sibi sed patriæ.--CICERO.

THIRTY-FIRST LIST.

R. (lately with Waller & Riley, Ltd., chemists, ALLEN, R. (late Bolton), R.A.M.C

Bolton), R.A.M.C.
Allsop, E. S. (lately with G. Pasco & Son, chemists, Hackney Road, N.E.), Honourable Artillery Company.
Barton, Bombardier J. W. (lately with Waller & Riley, Ltd., chemists, Bolton), East Lancashire Artillery.
Betts, W. (lately with Waller & Riley, Ltd., chemists, Bolton), R.A.M.C.
CAPETE, J. C. (with W. D. C. (1997).

Bolton), R.A.M.C.

CARTER, J. C. (with W. B. Cartwright, Ltd., Rawdon, near Leeds), Army Service Corps, Transport Section.

ELLIS, Second-Lieutenant Howard Cooke, (son of Mr. Robert Ellis, Ph.C., Aberystwyth), Royal Field Artillery.

GASSON, Second-Lieutenant W. H., ehemist and druggist (son of Mr. W. Gasson, F.C.S., M.P.C., J.P., Kimberley, South Africa), Royal Warwickshire Regiment.

HAVELOCK, Private — (lately with Waller & Riley, Ltd., chemists, Bolton), Lancashire Fusiliers.

HILL, E. (Irish representative of Thomas Bigg, Ltd., sheep-dip manufacturers, London), R.A.M.C.

KNOTT, Corporal Montague H. (lately with Mr. E. R. Pater, Ph.C., Retford), dispenser, 2/1 North Midland Divisional Casualty Clearing Station R.A.M.C.

LAWRENCE, Private R., chemist and druggist (lately with

LAWRENCE, Private R., chemist and druggist (lately with Waller & Riley, Ltd., chemists, Bolton), Argyle and Sutherland Highlanders.

McDonna, B. (lately with Waller & Riley, Ltd., chemists, Bolton), R.A.M.C.

Melvin, Sergeant Norman, chemist and druggist, of Fraserburgh, R.A.M.C.

Merson, Robert Burnett (son of Mr. G. F. Merson, Ph.C., Edinburgh), 9th Batt. (Highlanders) Royal Scots. Simpson, W. (lately with Waller & Riley, Ltd., Bolton),

R.A.M.C. TUCKER, R. (lately with Waller & Riley, Ltd., chemists,

Bolton), R.A.M.C.
WATSON, Frederic John (son and pupil of Mr. F. P.
Watson, Ph.C., Lincoln), 3rd Squadron Lincolnshire Yeo-

The following gentlemen connected with the drug-trade in

The following gentlemen connected with the drug-trade in Australia are scrving with the Australian Forces: HAMILTON, Sergeant L. (lately with Parke, Davis & Co., Sydney), 1st Contingent Expeditionary Force.
HENDERSON, G. D., chemist and druggist, Hamilton, N.S.W., Ambulance Corps, Expeditionary Force.
LAKE, Gunner D. (lately with Parke, Davis & Co., Sydney), Field Artillery, 3rd Reinforcements.
MURDOCK, Sergeant-Dispenser Geo. (lately with F. H. Faulding & Co., Perth, W.A.), A.M.C.
The following pharmacists are serving in South Africa: McMurray, Staff-Sergeant A., chemist and druggist (lately with Petersens, Ltd., Bloemfontein), South African Medical with Petersens, Ltd., Bloemfontein), South African Medical Corns.

REID, Staff-Sergeant J., chemist and druggist (lately with Heynes, Mathew, Ltd., Bloemfontein), 7th Mounted Brigade,

Field Ambulance.

Mr. H. M. Lancashire, son of Mr. Huston Lancashire, Ph.C., Church Street, Ballymena, has been granted a commission in the 18th Battalion Royal Irish Rifles, presently stationed at Hollywood, near Belfast.

Renneboog, the Belgian pharmacist who has been in the laboratory department of Wyleys, Ltd., Coventry, for some months, is answering the call of his country for more Red Cross dressers and medical men, and leaves England this week for one of the Belgian hospitals in France.

Mr. Haxton Adamson, chemist and druggist, of the firm of C. Adamson, Glebefield Aërated-water Factory, Leven, some months ago joined the Army Service Corps motor department, and was despatched to France. has now been appointed "dispenser" for the Corps.

Mr. Frank A. Gould, of Gould & Portmans, Ltd., 54 New Oxford Street, London, W.C., a director of Camwal, Ltd., who has been engaged since the outbreak of war as an instructor on the staff of the School of Musketry at Bisley, has been promoted to a first lieutenancy. Mr. Gould has just been appointed musketry instructor to the 96th Infantry Brigade at Portsmouth.

Notices as to Exports of Chemicals, etc.

India.—The export of paraffin-wax is prohibited except to the United Kingdom or to a British possession.

ITALY.—Among the latest additions to the list of prohibited exports are coccnut oil, ammonium nitrate, naph-

thaline, saltpetre-products, and various other chemicals. Sweden.—Previous lists of prohibited chemical exports have been revoked, and the following list, published in the "Board of Trade Journal," has been substituted by

Royal Decree of March 12:

Bandaging articles, with the exception of cellulose wadding, bandage gauze, charpic, and preparations thereof; articles of rubber for medical or hygienic use; magnesite; peptone for bacteriological purposes; guttapercha paper; silk for surgical use; magnesite bricks; bismuth and bismuth combinations; lysol (cresol soap solution); citric acid and tartaric acid; salicylic acid and salicylates; bromine, potascombinations; tysoi (creso soap solution); citric acid and tartaric acid; salicylic acid and salicylates; bromine, potassium bromide, sodium bromide, ammonium bromide, and other bromides and bromates, also organic bromine combinations; iodine, potassium iodide, sodium iodide, ammonium iodide, and other iodides, also organic iodine combinations; hydrobnomic acid; hydriodic acid; tartras stibico-kalicus (emetic salt); mercury; hydrogen peroxide; carbolic acid, cresol and meta-cresol; mastic and balsam of Peru, also styrax, crude or purified; mastic preparations; formalin in solid form (paraformaldehyde); litmus; camphor, refined; tannic acid; gelatin for bacteriological use; agar-agar; acetylsalicylic acid; adrenaline and salts and preparations thereof; aloes; alypin; antifebrin; antipyrin; arecoline and its salts; atropine and its salts; bromural and preparations thereof; diethylmalonyl urea (veronal) and its salts; digitalis-leaves and preparations thereof, such as digalin or digitotal; duboisin and its salts and combinations; epinephrine and salts and preparations thereof; epirenine and salts and preparations thereof; epirenine, physostigmine; guttapercha plasters, mercurial and mercurial carbolic; hexamethylenetetramine (urotropin, formin, aminoform) and its salts; hydrastis-root and preparations thereof; iedeform (urotropin, formin, aminoform) and its salts; hydrastis-root and preparations thereof; ipecacuanha-root; iodoform; cinchona-bark; cascara sagrada bark and its preparations; cinchona-bark; cascara sagrada bark and its preparations; quinine, quinine salts, and quinine combinations; chloral hydrate; ethyl chloride and methyl chloride; chloroform; caffeine and salts, combinations and preparations; cocaleaves; cocaine chloride; colchicine; mercury and mercury salts; preparations thereof for medicinal use, such as mercurial or mercurial carbolic guttapercha plasters; "Luminal"; morphine and other products of opium, such as codeine, etc.; movocain; opium; tincture and other preparations of opium for medicinal use; paranephrine and salts and preparations thereof; propogal; pyramidon salts and preparations preparations of optim for medicinal use; paranephrine and salts and preparations thereof; proponal; pyramidon (dimethylamino-antipyrin); rhubarb-root, medicinal, and preparations thereof; rhizoma veratri (white hellebore root); salipyrin (antipyrin salicylate); salvarsan and neosalvarsan; santonin and preparations; senega-root; senna pods and leaves; scopolamine (hyoscine) and its salts; sublimate pastilles; suprarenine and salts and preparations; the observations and salts and preparations; theobromine and salts and preparations; colchicum-seed and preparations; tropacocaine and salts and preparations thereof; vaccines and serums for medicinal and diagnostic purposes; permanganate of potash; suture-needles; clinical thermometers; catgut and strings thereof; opium.

UNITED KINGDOM.—By an Order in Council lacs of all kinds (including shellac, gum lac, seedlac, sticklac, and other forms of lac, but not including lac dye) are added to the list of goods the exportation of which is prohibited to all foreign ports in Europe and on the Mediterranean and Black Sea, other than those of France, Russia (except Baltic ports), Spain, and Portugal. Under the same Order alunite is added to the list of goods which must not be exported except to British possessions and protectorates. With reference to the notice on p. 33 of the C. & D. of April 10, relative to the supply of forms of application to persons desiring to obtain licences for the export of prohibited or restricted goods, the War Trade Department directs attention to Section 4 of the Customs (War Powers) Act, 1915, which provides that where licences have been issued for the export to a particular person or place of goods subject to prohibition or restriction outwards, the name of the person or place must be inserted in all invoices, bills of lading, manifests, and other documents relating to the goods. Penalties are imposed for any failure to comply with this provision.

Druggists' Goods as Naval Prizes

An auction of naval prizes was held in Liverpool on April 15 and 16, when great interest was evinced in the offerings, which included a miscellaneous and valu-

able assortment of goods captured from the enemy. As is usual at these sales, there were very few bargains, "good" all-round prices being realised. Many of the articles were of interest to chemists and wholesale drug-Many of the gists; they included six packages of very old cod-liver oil in casks, which sold at the extravagant price of 1s. 5d. per lb. The N.H.I. Tariff is only 1s. 1d. per pint, and local chemists sell a 16-oz. bottle for 1s.! Ten cases each containing 144 export bottles of Sanatogen sold at from 2s. $7\frac{1}{2}d$. to 3s. 4d. per bottle, according to condition of the packages. Two bottles of quick-silver, 75 lb. each, catalogued as "two iron weights," sold at 6l. 12s. 6d. the pair; and for fifteen cases mastich, each containing two tins of 36 lb. each, 10s. per case was paid. Other prices paid were as follows: Fourteen 1-cwt. casks powdered chalk, 10s. 6d. per cask; two cases pure carbolic acid, 33l. 15s.; three 1-cwt. case; two cases pure carbolic acid, 53l. 15s.; three 1-cwt. packages potass. permang., 19l. 15s. the lot; two casks powdered tartaric acid 1s. $6\frac{1}{2}d$. per 1b.; one case of 448 tabs. cocoa-butter, each $3\frac{3}{4}$ oz., 8l. the lot; one 1-cwt. net cask tannic acid, 4s. 1d. per 1b.; twenty-five tins chrome yellow, each 5 kilos, 12l. the lot; four cases of packets of 1 doz. photographic plates, 6½ by 4½ in., of packets of 1 doz. photographic plates, 6½ by 4½ in., 15l. 10s.; one case containing twenty-five dozen bottles potass. iodid., 12s. 6d. per doz.; one case of nine dozen bottles "Santal de la Mecque," 55s. the lot; one case of forty-three dozen tooth-brushes, 8l. the lot, equal to 3\frac{3}{4}d. each. Six cases toilet-soaps fetched good prices, and about ten cases of fine chemicals and drugs were bought by a firm of local wholesale druggists at about 1601. the lot; twenty bags, each 2 cwt., of potato-flour sold at 21s. per cwt. Other sales comprised 110 cases boot-polish, twenty-five cases metal-polish, etc.

Trade with Russia.

Great hopes are centred upon an enormous business being done through London and Archangel from May onwards, but, judging from a despatch from his Majesty's Embassy at Petrograd, the transport of general merchandise into Archangel is extremely doubtful. The authorities hold out no hope whatever of further facilities until July next, and refer the parties concerned to the only other available methods of transport—viz., rivertraffic in the spring and conveyance by sleighs till then.

The Board of Trade are in receipt of telegraphic information from H.M. Ambassador at Petrograd to the effect that a decree was published on April 11 by which the rates of the Russian General Customs Tariff for European trade are increased by 100 per cent. in respect of all German, Austro-Hungarian, and Turkish goods, and goods imported into Russia after passing in transit through Germany, Austria-Hungary, or Turkey. Enemy goods which are free of duty under the tariff are subjected to a special tariff, which is appended to the decree. In virtue of the same decree, certificates of origin for foreign goods imported into Russia will be required from the date of the receipt of the text of the decree by the various Russian Custom-houses. Sir G. Buchanan is forwarding, by telegraph, a summary of the very detailed regulations contained in the decree as to certificates of origin; and further information on this subject will be published in the "Board of Trade Journal."

The Manufacture of Fine Chemicals.

Professor H. Brereton Baker, F.R.S., contributes to "Nature" an article on the British supply of drugs and fine chemicals. He deals with difficulties of obtaining fine chemicals made in this country of a high standard of purity. Mention is made of the fact that German chemists have taken out within recent years some 800 patents for different medicinal preparations, of which many have been found of sufficient value to warrant their retention as commercial products. Dr. Baker states that Germans have made a special study of drugs obtained from vegetable sources. The sense of humiliation brought about by the present position should urge our chemical-manufacturers to render us independent of those who are at present our enemies. Dr. Baker doubts not that the manufacture can be done in time. Referring evidently to the work carried out at the Royal College of Technology, he states:

In one laboratory of university rank the manufacture of three synthetic drugs in large quantities has been carried on since the opening of the war, and the resulting products have been handed over to the naval hospitals, which were in urgent need of them. The preliminary investigation in this piece of work occupied a staff of seven experienced workers, under the direction of the professor, two whole months before the details of the processes could be mastered. The results not only gave to the naval service what was wanted at the moment, but they enabled the details of the processes to be handed over, through a committee of the Royal Society, to three manufacturers who will produce the drugs on a large scale. In a similar way the laboratory of another institution has succeeded in working out the process of making a natural drug from its plant sources

He gives these instances to illustrate the magnitude of the task which is before us, and the amount of highly specialised labour which must be employed on the problems. The suggestion is made that a National Chemical Laboratory analogous in constitution and management to the National Physical Laboratory should be established, in which the products of British manufacturers of fine chemicals could be tested and the standard of purity guaranteed.

Personalia.

Captain A. C. Aitken, of the 9th Battalion (Highlanders) The Royal Scots, popularly known as "The Dandy 9th," is now adjutant of the battalion, which is still in training in Edinburgh. He figured in a photograph in an Edinburgh evening paper last week depicting Major Clark presenting Lieutenant Kenneth Mackenzie with the bronze medal of the Royal Humane Society for saving a corporal from drowning in Leith Docks last December. Captain Aitken is the son of Mr. Robert Aitken, of Baildon & Son, and was, like his father, with John Bell & Co., Oxford Street, London, before returning to take his share in conducting the Baildon business. He was an officer in the Territorials before the war broke out, and automatically took over daily military duties.

In the official casualty list issued under date March 30, appears the name of Second-Lieutenant W. H. Hedges, South Midland Field Company Royal Engineers. Mr. W. H. Hedges is the only son of Mr. William Ross Hedges, chemist and druggist, the present head of Hedges (Chemists), Ltd., Birmingham. He was wounded in both legs by a German sniper while endeavouring to succour a wounded sapper in front of the trenches. The following account of the occurrence has been received in Birmingham from a member of his company:

"... Several of our sappers were detailed off to do a job in front of the trenches. They had completed it and were returning, when they were suddenly fired on by the Germans, and one of them, being shot in the leg and thigh, was unable to get back. Lieutenant Hedges, who was in the trench at the time, crawled over the parapet towards the wounded man, and had got some distance towards him when he was shot in the legs by a sniper. An infantry officer next went out to rescue them, but was also fired on, and had to get back to the trench. The sapper had by this time crawled along the ground till he came to a 'Jack Johnson' hole, into which both he and Lieutenant Hedges crept, and there they had to lie until dark, when a stretcher-bearer party went out to bring them in. Lieutenant Hedges had to be carried about 500 yards under continual fire, and the stretcher-bearers frequently had to put the stretcher down and lie flat on the ground.' We are informed that Mr. Hedges is now in hospital in London, and we are glad to be able to report that his wounds, though severe, are not likely to cripple him permanently.

Miscellaneous.

The Mincing Lane and Mark Lane Volunteer Training Corps formed last December has a membership of 280, but an effort is to be made to increase it sufficiently to form a second company, which, if successful, would mean a total of about 500 men.

German Dyes for U.S.A.—Sir Cecil Spring Rice, the British Ambassador, has informed the State Department that arrangements have been made to ship to the United States two cargoes of German dyestuffs now at Rotterdam and paid for by American importers before March 1. It is learned at the Embassy that there is no objection to

the shipment of these cargoes, the delay in moving which is to be attributed to the difficulty of establishing the facts

Manchester Chemical Students have been obtaining some practical experience in chemical engineering during the Easter vacation. A party of twenty-four students from the chemical department have been assisting in the erection of new plant for the manufacture of phenol and toluol at the works of H. N. Morris & Co., Gorton Brook. The work is mostly that usually performed by general labourers, but nevertheless appreciated by the works, and capable of affording experience in a modest branch of chemical engineering.

ALIEN ENEMIES' PATENTS.—The Board of Trade have granted Levinstein, Ltd., licences to use patents 2918/09 (Haas) and 9689/09, 14143/09, 18822/09, 22138/10, 27051/10, and 489/11 (Leopold Cassella & Co. G.m.b.H.), referring to the manufacture of carbazol and indophenolic dyes. An application to suspend or avoid patents 13955/04, "Reducing-agents," and 22453/11, "Formaldehyde sulphoxylates," belonging to the Badische Anilinund Soda-Fabrik, has been made by C. S. Bedford on behalf of the Yorkshire Dyeware and Chemical Co., Ltd., Leeds. The hearing is to take place at the Patent Office on April 30.

British Red Cross Society.—We referred (C. & D. March 20, p. 34) to the organised appeal of the British Brush-manufacturers' Association for contributions from the brush-trade towards the funds of the British Red Cross Society. The collection was made not only from the brush-trade, but from the employes of the firms. The result is that a sum of 8161. 18s. 6d. has been sent to the Red Cross organisation. From the list of contributors which we have received from Mr. T. Marston Till it appears that nearly 200 firms of brushmakers and bristle and fibre merchants joined in the movement which has resulted in such a handsome sum being raised.

FRENCH ARMY CONTRACTS.—We understand that revised instructions have now been issued by the French Ministry of War with regard to the placing of contracts for goods which involve the supply of material from the United Kingdom. In accordance with these instructions it is now provided that a contractor who wishes to obtain from the United Kingdom, for the due execution of a contract, any material the export of which is prohibited, shall attach to the contract an application for permission to export the goods concerned, giving the names and addresses of the British manufacturers from whom he proposes to order them. If the con-tract is signed, the application in question will be communicated through the French War Office to the Commission Internationale de Ravitaillement for the consideration of the Departments of H.M. Government concerned, who are represented on this Commission. In the event of the application not being granted, the contract will be rescinded without involving the contractor in any penalty or indemnity, provided he informs the authorities of his inability to obtain the desired permission within eight days of his application being refused. It is hoped that this new arrangement will obviate any difficulties which may have been experienced in the past in obtaining from the French military authorities the evidence as to the destination of the goods which is required by the Commission Internationale de Ravitaillement.

Practical Sympathy.

We have reported on more than one occasion the real benevolent interest which firms connected with the drugtrade in the United States are taking in the European war, especially in regard to the relief of the British wounded. The latest instance of this which has come to our notice is on the part of Mr. Fred. E. Himrod, 261 Broadway, New York, who has sent a first donation of 251. to the Red Cross Society through Mr. F. R. L. Newbery, Charterhouse Square, E.C. Mr. Himrod, in the course of his letter, says:

"I well know that the financial drains for the sick and wounded and in taking care of the destitute Belgians are something terrific at the present time, and I feel that we here in America, whose fight you are fighting as well as your own, should do something more than merely send

words of sympathy. There is no doubt at all of the Allies winning if sincere sympathy and good wishes for the cause will help it."

Mr. Himrod has also contributed to the Belgian Relief Fund through the Belgian Consul.

German Chemical-industry.

In the course of a lengthy article on this subject, the "Kölnische Zeitung" remarks that two of the most important factors in warfare are the manufacture of explosives and the supply of medicinal remedies, and these depend upon chemical industry, the exceptionally high position of which in Germany is recognised even by her enemies. The country which is able to heal her wounded in the shortest time, and to render them fit for service again, has necessarily an enormous advantage over her adversaries, and this was one of the deepest reasons for Germany's hope of victory, and of her people's instinctive feeling of the certainty of victory. The supply of raw materials was of supreme importance, and although a beginning had been made in regard to independence of imports, much remained to be done, permanent independence of imports being possible only by more systematic exploitation and working-up of home products. The large requirements of glycerin by Germany could be met if existing waste of it in the soap and textile industries were prevented, and a beginning has been made in this by a new regulation preventing direct saponification of fats with alkali; instead, the fats must now be hydrolysed into fatty acids and glycerin, the acids alone being used in the manufacture of soap. Only the first steps have been taken in this direction, says the "Zeitung," and there are still numerous cases where raw materials are wasted. It is suggested that leaders of industry should voluntarily devise means of taking those steps should voluntarily devise means of taking those steps which, later on, with a protracted war, will be forced upon them. The solution of the problem for obtaining rubber is still doubtful. Processes are known for producing synthetic rubber from the products of the fermentation of starch, and perhaps during war, when the question of the cost of production is submerged, the opportunity will arise for converting chemical theory into practice. [Parenthetically, we recall the fact that at the International Congress of Applied Chemistry in New York in August 1912 Professor Duisberg showed "two excellent specimens of motor-tyres made of synthetic rubber manufactured at Elberfeld." It is now reported that on Monday, April 19, there was to be commenced in Germany a systematic collection of rubber articles, from old shoes to baby-comforters. Verb. sap. sat.—EDITOR C. & D.] With regard to nitric acid, indispensable in the manufacture of explosives, experiments have been conducted for many years past for uniting oxygen and nitrogen to form nitric acid, and only at an enormous expenditure of power is it possible to overcome the resistance of these two elements. At great expense has it been possible to make experimental trials in the vicinity of water-power or other less expensive energy. It is a different matter now, the question of expense again being secondary here at present, and the discovery of the best conditions of production is only a question of time, which will probably make Germany independent of Chile saltpetre and Norwegian water-power also in times of peace. Another interesting problem is that of heating. As a number of important raw materials are obtained from coal-tar, a by-product obtained in producing coke, which is the fuel used in the iron-industry, its production fluctuates with the work in iron and steel factories. Owing to the present restricted output of the large ironworks, the coke-works have also limited their output, and the production of coal-tar and other important by-products has thus been restricted at a time when an increase of the same is of the utmost national importance. This can only be remedied by a compulsory increased consumption of coke.

SULPHONAL was accidentally discovered to possess hypnotic properties in connection with experiments on the transformations of sulphur-compounds in the animal system. A dog which had been dosed with the newly discovered sulphonal in Baumann's laboratory at Freiburg-i.-B. was found to fall into a deep sleep.—Professor P. F. Frankland.

Imperial Institute Developments: What the Staff is Doing to Help Trade during War Conditions.

AT a time when British manufacturers are making supreme efforts to capture trade from their German competitors, it is appropriate to give in this Colonial Issue an outline of the recent developments which have taken place at the Imperial Institute with the object of initiating and seconding those efforts. With this idea in view a representative of The Chemist and Druggist has interviewed Mr. Harold Brown, Ph.C., technical superintendent of the Scientific and Technical Department, about the formation of the Technical Information Bureau, which has already been at work for several months. The establishment of this Bureau is really not an outcome of the war, but is due to the fact that for several years past there has been a considerable increase in the number of inquiries received at the Imperial Institute from manufacturers, merchants, and others in Great Britain, the Dominions, the Colonies, and India. These inquiries relate principally to new sources of



THE IMPERIAL INSTITUTE.

supply of raw materials, methods of utilising new products from the Colonies and India, or to new or littleknown processes and machinery for industrial purposes. The number of these inquiries has now become so great that the Secretary of State for the Colonies authorised the formation of the Bureau for dealing with them. The Bureau, it may be said, is a special branch of the Scientific and Technical Research Department (of which Dr. T. A. Henry, Ph.C., is the head), and is staffed mainly by experts who have had the advantage of experience in the work of that department, which is carried on in communication with producers in the Colonies and with manufacturers and users of raw materials in this country. At the present time the Bureau has special opportunities of making its influence felt owing to the cutting-off of German and Austrian trade, which is likely to lead to the development of many industries in this country and in the Colonies which have hitherto been monopolised by Germany. In furtherance of this object the Bureau is issuing from time to time special circulars dealing with Colonial and Indian raw materials, and especially with those that might be more extensively used in the United Kingdom. It is giving wide publicity to these circulars among the members of Chambers of Commerce at home and abroad. Lists of producers and shippers of various items of produce in our Colonies are also being compiled at the Bureau from official information obtained from abroad, so that the shipper and manufac-turer can be brought into direct relationship. This feature is capable of great extension, and the Bureau will have exceptional facilities for obtaining accurate and practical information which individual firms are often unable to acquire.

OLEAGINOUS PRODUCTS.

Already several circulars have been issued; those involving the largest and most important commercial

interests deal with palm-kernels and copra, which two products have been exported in the past on a very large scale to Germany, to be worked up into oil and feeding-cake, the former being then largely exported to England. Every effort is now being made to transfer these industries to the great oil-seed crushing centres of Liverpool and Hull. In Liverpool alone immense quantities (about 123,000 tons) of palm-kernels and palm oil have already been received from West Africa during this year, and much more could be dealt with if the tonnage was available. Several of the great milling companies are making alterations in their machinery in order to crush palm-kernels, so that in the near future much greater quantities can be disposed of. The extent of this in-dustry may be gathered from the fact that over 250,000 tons of palm-kernels (worth more than four million pounds sterling) are exported annually from British West Africa (principally from Nigeria). Almost the whole of this has hitherto gone to Germany, but to-day the great crushing-mills and manufacturing-plants at Harburg and Hamburg are idle. A statement giving full information regarding the German palm-kernel industry was published in the "Bulletin of the Imperial Institute" (1914, 3), and further information was given in the succeeding number, which also contains a comprehensive article on copra and its utilisation. The West African Sections of the London and Liverpool Chambers of Commerce have also moved in the matter, and a special pamphlet issued by the former body gives many facts in a succinct form. The question of inducing and educating British farmers to adopt the use of palm-kernel cake (left after expressing the oil), as the German farmers have done, is having close attention by the Imperial Institute and the Board of Agriculture. There is every reason to believe that of Agriculture. There is every reason to believe that manufacturers of margarine, soap, etc., can take practically any quantity of the oil that may be available. In fact, to-day's high prices of palm oil (36l. to 40l. per ton) bear this out. There is plenty of evidence to show that had not the war intervened Germany, by her methods of undermining British firms, would in probably less than five years have acquired practically all the business in oil-seeds. So important were their imports that the Hamburg Produce Exchange took the initiative a year ago of supplanting the so-called "London contract" for oil-seeds by a German contract, by which the arbitration court and the analyses were placed in Germany. For several years past that country has been the world's largest consumer of copra, a position formerly held by France. The principal facts are given in a special circular of the Bureau, and we may add that in 1912-13 Germany took some 196,000 tons and the United Kingdom 30,000 tons only. That is a big difference, and it is now up to British manufacturers to take advantage of the present unique opportunity. The curious part is that most, if not all, this copra was worked up in Germany into unrefined or refined coconut oil for the British mto unrenned or refined coconut oil for the British markets. During the financial year 1913-14 Great Britain took from Germany 856,000l. worth of unrefined and 521,000l. worth of refined coconut oil, mostly made from copra exported from our Colonies, Ceylon, and India. Does this show the supineness of the British manufacturers, There come to be no recommendation. turer? There seems to be no reason why the produce of British possessions should be sent to Germany and then re-exported to another country of the British Empire. The conservative nature of the British manufacturer is notorious, however, and there does not appear to be the keenness shown to capture German trade that there ought to be—e.g., formerly Germany imported large quantities of wattle and mangrove barks, and made the "extract" at Hamburg, which was sent to the tanners in this country. Now there is no more "extract" to be had, and there is plenty of bark almost unsaleable at our doors, but the tanners have not, and will not, erect the plant for making the "extract"—another instance of dependence on Germany.

The commerce of ground-nuts (Arachis hypogaa) is the subject of another Bureau circular; the extent of the business may be gauged by the fact that imports into Europe exceed eleven million tons annually, the value being over six millions sterling. Before the war France, Germany, and Holland were the most important crushing centres; in 1912 France took 9,500,000 cwt., valued at 6,597,000\(\ell\); Germany 1,930,000 cwt., valued at 1,318,000\(\ell\). while the United Kingdom imports, being unimportant, are not classified separately, yet the British Empire fur-Germany nishes over seven million cwt. annually. especially has increased its consumption in recent years, but producers are still mainly dependent on Marseilles for the absorption of their supplies. The consequence was that when war broke out the Indian producers were placed in a serious position, as the Marseilles mills were unable to take their normal supply. In these circumstances it is desirable that a market should be created in the United Kingdom for Indian and other British-grown ground-nuts. Already a fair quantity has been imported into Hull, but compared with the supply available in India the amount

DRUG-SUPPLIES. Among the circulars dealing with minor, but not less interesting, products are those relating to the supply of drugs, such as Egyptian henbane, senna, preparation of thymol, and raw materials from the Sudan, concerning which particulars have already been given in this journal. In view of the great scarcity of atropine the fact that an ample supply of Egyptian henbane (Hyoscyamus muticus) will be available is of particular interest. The Egyptian trade in drugs previous to the war was in the hands of German firms which have since been expelled from the country. They, however, took care to buy up practically all the supplies of henbane at the beginning of the war, and at the moment there is difficulty in obtaining supplies. The Imperial Institute has, meanwhile, taken all possible steps to encourage further production and the cultivation of the plant is now being arranged for on waste lands in Twelve years ago the Institute called the attention of British alkaloid-makers to Egyptian henbane, and several firms did start importing and manufacturing, but all the same Germany acquired predominant control of the raw material and the manufacture of the alkaloids. Similar conditions applied to Egyptian senna, the supplies of which, owing to the action of the National Health Commission and the Imperial Institute, are now assured to Great Britain and France, much to the chagrin of some of the principal foreign users who formerly bought their supplies at the source. It is to be hoped that the Egyptian senna-trade will be placed on a sounder footing and that the question of adulteration by native dealers will be looked into. Formerly the United States purchased between 2½ million and three million lb. annually, but this business will now revert to London. acacia is another item, the Egyptian supply of which to Germany has been cut off by the war. Last year, for instance, over 80,000l. worth was sent to Germany and Austria combined, and the whole of this additional supply is available. There are many other interesting Sudan products which are being developed, including millet, sesame, ground-nuts, and vegetable-ivory nuts. Germany absorbed large quantities of the last-named for the manufacture of buttons; on one occasion we remember a consignment of these nuts, under the name of dom nuts, was offered in London, but nobody knew of their use here. One of the minor results of the European war is a great scarcity of thymol, because all the raw material was formerly ex-ported from India to Germany. In this instance the Bureau has disseminated the necessary information to various firms of British manufacturers, of whom there

POTASH SALTS.

Numerous inquiries have been received at the Institute in regard to potash salts, and the Bureau is preparing an important pamphlet as to the sources of potash, which will include some hitherto almost untouched for industrial purposes. At present our possible sources of supply are limited to imports of nitre from India (which, by the

way, have considerably increased since the war). In India we have almost an unlimited supply of saltpetre, the trade in which has been in a comparatively moribund condition owing to the competition of the Stassfurt deposits. Exports are less than 300,000 cwt. annually; fifty years ago they were treble. We think we have sufficiently indicated the direction in which the Bureau is assisting British trade, and finally we draw attention to the prospect of obtaining regular supplies of

INDIAN OPIUM

for British makers of the alkaloids. This is a matter which the Imperial Institute has been working at for some time in conjunction with the India Office, and we should not be surprised if eventually adequate arrangements were made to render home markets more independent of Turkey and Persian supplies. Naturally, there are many technical difficulties in the way, which only time and experience can solve. We understand that a consignment of over 200 cases of Indian opium was recently sold in London to a manufacturer, and that the average morphine-content worked out at about 8½ per cent., which is about 2½ per cent. higher than usual. The regulation of prices would be a difficult matter, and unless some understanding is arrived at considerable market disturbance would ensue. At the present time, for instance, there are well over 2,000 cases of Persian opium held on the London market by wealthy firms, who ask between 17s. and 20s. per lb. Suppose, for instance, the Indian Government appeared as a seller at, say, 8s. 6d. or even 10s. per lb.—a profitable figure to them—the indignation of importers could be better imagined than described.

It has been suggested from time to time that failing supplies of Turkey opium we can get all we want from India, but the two opiums are very much unlike. The preference of opium-smokers for Indian opium is due in part to its superiority in flavour or aroma; it is, in fact, the champagne of the opium-smoker, and to it other opiums compare as beer does to champagne. Moreover, and speaking generally, the Indian opiums of the highest smoking class are the poorest in morphine-content, 3 to 4 per cent. being the average of the best. Rarely does Indian opium contain the pharmacopœial percentage of morphine. We have before us numerous morphiometric results recorded during the past sixty years, and 8 per cent. of morphine is the predominating maximum. The narcotine-content is almost invariably higher than the morphine, and the codeine is, according to "Pharma-cographia," from 0.2 to 0.4 per cent.—Thoms records 0.2 to 0.3 per cent. in Turkey opium, and Van der Wielan 1.08 and 1.29 per cent. and 1.5 per cent. in Persian opium. The "Dictionary of Economic Products of India" states that the manufacture of alkaloids and alkaloidal salts at Benares yielded in the year 1887-88 242 lb. 14½ oz. of morphine hydrochloride, 34 lb. 11 oz. of morphine acetate, 19 lb. 10½ oz. of morphine sulphate, and 30 lb. 10½ oz. of codeine. The opium-factory at Ghazipur is the centre of codeine. The opium-factory at Ghazipur is the centre of interest as regards the production of medicinal opium Reports. In 1912-13 this and opium alkaloids in Benares. In 1912-13 this factory sent out $610\frac{1}{2}$ lb. of opium, and manufactured 156 lb. of morphine, 363 lb. of morphine hydrochloride, 6 lb. 10 oz. of morphine tartrate, and smaller quantities of acetate and sulphate, besides 109 lb. $9\frac{1}{2}$ oz. of codeine and 18 lb. of narcotine. The alkaloids are still being steadily produced in India, and come on the market here in a not quite pure condition. Satisfactory as this may be, the objection to Indian opium from the manufacturers' point of view is that in addition to the small yield of morphine, the opium is "dirty" to work, for it contains 70 per cent. of extractive, compared with 50 per cent. in Turkey opium. For pharmaceutical purposes the high narcotine-content is objectionable, but we may recall one of the best records on this point by Paul and Cownley, who in 1892 found in a sample of Patna opium issued by the Medical Store Department of Bengal for medicinal use 8.55 per cent. (on the dried opium) of morphine. A tincture made with the dried opium according to the B.P. (1885) directions gave 21.3 grains of dry extract per fluid oz., and contained 2.74 grains of morphine per fluid oz. Compared with this, a tincture

are now several keenly interested.

made from good Turkey opium containing 10.84 per cent. of morphine (calculated on the dry opium) gave a tincture containing 19.8 grains of dry extract per fluid oz. and 3.4 grains of morphine per fluid oz. The qualities of Indian opium vary with the locality of origin, but the variety of the poppy has more to do with modification of the alkaloid in the fruit-juice, as was proved by Mr. Scott and mentioned in Sir George Watt's report in 1891. Commenting upon the matter then we said:

Mr. Scott's observations were made upon plants experimentally grown by himself, and compared with plants from the fields. Every care was taken to keep each distinct, and it is therefore of much value, as a commentary upon the recent suggestion to employ Indian opium in British medicine, to notice the morphia yield of the inspissated juices from the respective poppies. It is notable that in all cases the alkaloidal value is very much lower than that of Asia Minor opium. These are the figures in percentages:

Varcotine	Morphine	Total
3.4	 2.98	 6.38
3.31	 2.88	 6.19
3.14	 3.16	 6.57
3.65	 3.56	 7.21
3.71	 3.71	 7.42

These results are taken from opium which has not undergone any "cooking," so that destruction of morphia is excluded. But that is of little moment in view of the relative proportions of narcotine and morphine in the opium. Narcotine, it will be seen, is the chief constituent; it is the objectionable principle of opium, and exists in Asia Minor opium to the extent of scarcely more than a fourth of the morphine present. It is obvious, therefore, that, apart from the low morphine-content of Indian opium, its high percentage of narcotine quite unsuits it for medicinal use. The question arises: Can the varieties of poppy at present grown in India be made, by different methods of culture, to yield an opium of equal value to that from Turkey? The question cannot be satisfactorily answered until the true Papaver somniferum var. glabrum has been cultivated in India; but it seems unlikely that this plant could degenerate in that country to the condition of the plants which have so long been propagated there. It is not a matter of culture at all, but one of botanical variety; and Dr. Watt is right in asking that greater attention should be paid to this branch of the subject. His whole report, several sections of which we have not ventured to touch, is one which should throw considerable light upon a somewhat obscure subject.

More recent (1904) observations on this point by Professor Thoms, of Berlin, are corroborative. Poppies were cultivated in Germany from two kinds of poppyseeds, one blue and the other white. The dried opium obtained from the blue-seeded poppies yielded (a) 16.5 and (b) 20 per cent. of morphine, and (a) 9.5 and (b) 6.25 per cent. narcotine, while that from the white-seeded poppy yielded 6.85 per cent. of morphine and 33 per cent. of narcotine. Considering all these factors, especially the production of medicinal opium and codeine and morphine in India, there can be little doubt that poppies can be cultivated which will provide an opium better suited for manufacturing-purposes than the smoking-opium which is the object of poppy-cultivation in our great dependency.

The Information Bureau is only one branch of the Imperial Institute, and the Scientific and Technical Research Department will continue as before to investigate the commercial possibilities of raw materials from the Colonies and India in its own laboratories and workshops. The Institute possesses an excellent Reference Sample-room, in which are arranged samples of the principal materials which have been investigated and valued commercially during recent years, and as to which full information is available. The Room contains thousands of specimens, the identity of which is well authenticated, but the commercial possibilities must be left to the keen City man, who frequently resorts to the Institute in search of information or for the identification of samples he has received. Fixed and essential oils and fats predominate, and there is a wide range of acacia and fossil gums, barks, oil-seeds, drugs, rubber, cotton, silk, tobacco, timber, and much other produce.

India and the East.

(From the "C. & D." Correspondents.)

THE REPORT in Indian papers that Dr. David Hooper, F.C.S., is taking up an appointment in the Carnegie Institute, Washington, U.S.A., is erroneous.

Indigo Outlook.—A Government communiqué from Simla states that the indigo outlook is very promising, as recent discoveries made by Mr. and Mrs. Howard, the economic botanists, will result in an increased yield and a reduction of disease. The question of appointing a special chemist is being considered.. Indigo-planters appear to be fully satisfied with the Government work on the agricultural side.

N. Powell & Co., of Bombay, who have an extensive connection throughout India as hospital furnishers, have obtained a contract from the Indian Government for fitting up several field and base hospitals for the British Army in India. The firm have also fitted up the hospital ships Loyalty and Madras, and the Lady Hardinge War Hospital, which is one of the biggest hospitals for the wounded Indian soldiers who are taking part in the European war.

INDIAN-MADE THYMOL.—Mr. Probodha Ch. Chattopadhyay, M.A., F.C.S., perfumery expert and chemist, working in the laboratory of the Bengal Chemical and Pharmaceutical Works, Ltd., Calcutta, is the first in India to make thymol from ajowan oil. Mr. Chattopadhyay had been working on this for the last three years, and when H.E. the Governor of Bengal visited the works on November 23 last thymol was already being made in the crude state for the firm's own use. Now, however, he has obtained pure white crystals, and the company hope to manufacture it on a large scale in the near future.

INDIAN SALTPETRE.—In view of the increased business being done in Indian saltpetre with the United Kingdom, the following figures, showing the exports from Calcutta for the last four years, are of interest:

	1911	1912	1913	1914
	Tons	Tons	$_{ m Tons}$	\mathbf{Tons}
United Kingdom	2,649	1,943	2,615	6,354
Continent	105	27	85	124
America and West				
Indies	3,62 6	2,518	2,855	1,151
China and Japan	4,738	4 833	3,941	2,710
Straits	472	523	447	205
Mauritius	2,129	1,721	2,226	1,169
Colombo	1,267	1,811	2,184	2,060
Other ports	47	28	242	69
•				
Total	15,033	13,404	14,595	13,842

The decrease during 1914, compared with 1913, was 753 tons, but 1915 is likely to show a substantial increase.

Mysore Sandalwood.—The report on the Administration of Mysore for 1913-14 (published in the "Indian Trade Journal") says that the quantity of sandalwood collected was 2,945 tons. Including the previous year's balance of rough wood, the total quantity available for preparation for market was 3,808 tons. Out of this, 2,818 tons was worked up during the year, yielding 2,234 tons of good wood and 283 tons of white chips, the remainder having been lost in conversion. The balance of rough wood at the close of the year was 990 tons. The cost of collecting 2,945 tons of rough wood and of preparing 2,284 tons of good wood amounted to Rs. 70,771 against Rs. 66,625 incurred in the previous year for the collection of 2,883 tons of rough wood and the preparation of 2,260 tons of good wood. The total quantity of sandalwood sold during the year was 2,148 tons, against 2,419 tons in the previous year, and the revenue realised (uncluding a sum of Rs. 699 realised by the sale of 285 tons of white chips) was Rs. 22,57,542, against Rs. 22,68,608 in the previous year. There was a considerable rise in the rates secured for all classes of sandalwood even over the unusually high rates of the previous year, the average price per ton realised being Rs. 1,067, or Rs. 127 more than that realised in the previous year, and being more than double the average rate of the decade ending with 1911-12.

Glass for Technical Purposes.

TWO important reports, covering different aspects of the supply of glass for technical purposes, have been issued this week. The first of these is the report of the British Science Guild with reference to the manufacture of optical instruments and matters relating thereto. On the outbreak of hostilities the Guild appointed a Committee of experts to inquire into the question of the supply of glass for optical instruments, most of the newer varieties of which originated in Germany. This Committee has now issued a report, which is submitted to the Government with a special note as to the pressing urgency of the subjects referred to. The report is as follows:

SUPPLY OF GLASS. (a) The Gineral Case.

1. In the first place, the inquiry referred to was directed to the consequences of the sudden stoppage of the supply to the consequences of the sudden stoppage of the supply of German optical glass on which this country had increasingly relied for many recent years. A letter of inquiry asking for information on six specific points was addressed to representative firms in the optical-trade. The result of these inquiries has been such as to satisfy the Guild that the supply of optical glass available for the manufacture of telescopes, binoculars, range-finders, and other Service instruments is sufficient for the purpose. Under this head there seems to be no call for any special effort to improve upon existing conditions, though the supply of English glass has not always been adequate in quantity, and delays have been experienced in obtaining quick delivery.

The representative of Messrs. Chance Bros., who was a member of the Technical Committee referred to above, has assured the Committee that since the outbreak of hostilities

assured the Committee that since the outbreak of hostilities the firm has considerably increased (in fact, quadrupled) the capacity of its plant for the manufacture of optical glass, and is fully prepared to extend this plant still further.

(b) Photography and Micrography.

2. With regard to the manufacture of photographic and nicroscopic lenses the case stands otherwise. The requirements of the manufacturing trade in these respects are not definitely standardised, as in the case of the instruments already referred to. To facilitate new and important developments it is necessary that the lens-manufacturer should have recourse to a greater variety of glasses than are in fact manufactured at the present time in this country. It fact manufactured at the present time in this country. It is further necessary that larger stocks should be held than is the custom at the present time of the various glasses produced. The Guild, therefore, is of opinion that serious inconvenience is certain to result to the manufacturing trade if the supply of German glass is cut off for any considerable length of time. The amount of glass demanded, especially for photographic purposes, is very considerable, and the Guild is of opinion that the attention of the authorities might usefully be drawn to this opportunity for a considerable development of British glass manufacture in this direction. One difficulty the Guild understands to be the defective supply of pure barium-compounds.

(c) Variety of Glass Obtainable Inadequate.

(c) Variety of Glass Obtainable Inadequate.

3. From a wider point of view and more generally, the variety of English glasses offered is not sufficient for all the requirements of optical-instrument makers, especially for the more recently developed and important optical designs. Thus, while the English leading firm listed only twenty to thirty types of glass, the leading German firm listed about seventy types, every one stocked. Barium glass of high refraction and low dispersion—i.e., having a high value of the "anti-dispersion" coefficient—is reported as specially difficult to obtain in England. difficult to obtain in England,

RESEARCH.

ARSEARCH.

4. The desirability of the provision of facilities for research upon the manufacture of optical glass has been carefully considered, and has been found to be a difficult question. From the evidence submitted it appears that if one special object of research could be attained the result would be highly advantageous. This object is the discovery of a refractory lining of the melting "pot" which would resist the action, at melting temperatures, of the materials used in the glass mixtures, and leave the contents of the pot uncontaminated at the conclusion of the operation. This research would probably be a long and costly one, and is such as might most appropriately be undertaken by the is such as might most appropriately be undertaken by the National Physical Laboratory, especially as certain details in the manufacture of optical glass may come under review during the inquiry.

AUTHORITATIVE TESTING OF GLASS.

5. In another direction evidence was submitted to the Guild to the effect that it would be distinctly advantageous to the optical-trade if increased facilities for the authoritative determination of the optical constants and relative absorption of samples of glass submitted for test could be provided at the National Physical Laboratory.

'ACILITIES FOR EDUCATION A MATTER OF GREAT URGENCY.

6. In still another direction evidence, additional to evidence collected before the outbreak of hostilities, was elicited that the facilities for education in technical optics are very inadequate. It was shown that not only could some of the present difficulties connected with the supply of optical glass probably be diminished, but that the output of optical instruments for national purposes would be increased, and that the optical-trade would be substantially benefited in other directions if such facilities were largely extended. The Technical Optics Committee of the Guild was originally appointed, early in the year 1914, for the purpose of "inquiring into the need of an Institute of Technical Optics and the steps to be taken in connection therewith," and in due course it submitted a "statement" on the subject, which was published in the Annual Report of the Guild, 1914, pp. 31-34. The Committee had further reported to the Executive Committee of the Guild at its July meeting, and the report was adopted with a few alterations, and is printed at the end of the report.

7. When the Technical Optics Committee met after the vacation, the other matters, apparently of more immediate of optical glass probably be diminished, but that the out-

are the rectine of the report had arisen and took precedence of the earlier matter. In investigating these new questions it has become strongly evident that the earlier

matter is of supreme and pressing importance.

The Guild therefore recommends:

A. That better provision should be made at the National Physical Laboratory for the testing of samples of glass as to their physical and optical properties, and that the Director of the National Physical Laboratory be approached on the subject.

on the subject.

B. That facilities should be provided as speedily as possible for the carrying-out, at the National Physical Laboratory or elsewhere, of the researches connected with the manufacture of optical glass referred to in this report.

C. That steps should be taken as speedily as possible to give effect to the recommendations of the previous report of the Technical Optics Committee of the Guild in the direction of providing facilities for systematic, scientific, and manual training in technical optics; and the Guild, recognising that educational training requires time, is strongly of opinion that this question is urgent, and that the organisation of optical training should be taken in hand at once. at once.

The report referred to in paragraph C is one which the British Science Guild made on July 14, 1914, advocating the establishment of an Institute of Technical Optics on the lines of the scheme which has been before the Governnors of the Northampton Polytechnic Institute for some years. The Northampton Institute has been looking to the London County Council for the money required to build the Optical Institute on a site already acquired; but it is understood that the Finance Committee of the London County Council hold the opinion that the scheme, being of an essentially national character, should not be financed solely by the London ratepayers.

FORMULAS FOR GLASS.

The second report is issued by the Glass Research Committee of the Institute of Chemistry, which was appointed in October to conduct investigations with a view of arriving at suitable formulas for laboratory glassware, miners'-lamp glasses, combustion-tubing, resistant glass for pharmaceutical products, glass for x-ray bulbs, etc. Reference was made to the work of this Committee in the C. $d\cdot D.$, February 27, p. 51, and to the decision arrived at to carry out melts on a large scale at a manufacturer's works. The present report states that the eleven formulas given are based on the results of about 400 experimental melts, and that, in addition, a very large number of experiments have been made in order to study the influence of the various constituents employed. No formula has been issued without submitting the specimens made to rigorous tests to prove their suitability for the purposes for which they are intended. Moreover, by varying the experimental working conditions it can be said with reasonable confidence that the mixtures will prove equally satisfactory under the actual working conditions of

a glass-furnace. The question of workable temperatures has been carefully considered, and, so far as it is possible to judge, the melts on a small scale indicate that even better results will be obtained on the industrial scale. This view has been justified by the samples already received from manufacturers who have tried some of the

In deciding the formulas it has been found necessary to direct special attention to the proportions of basic and acidic substances in respect of the action of glass mix-tures on clay crucibles during fusion, and it has been shown by careful investigation that the formulas proposed give melts in which the influence of the ingredients of the crucibles is very slight, and in some cases practically inappreciable.

The formulas are as follows:

SOFT GLASSES,

suitable for ordinary chemical-laboratory ware.

		(1)			
Sand Sodium (Na ₂ CO ₃)	carbonate		Calcium carbonate Alumina (Al ₂ O ₃)	Parts 11.6 6.5	5

A soft glass, which does not give up alkali readily to water, works well in the blowpipe, and does not devitrify readily.

			(2)	١.			
]	Parts 1			F	arts
Sand			67.0	Calcium	fluoride		1.6
	carbona	ate	1	Alumina	(Al_2O_3)		8.3
(Na_2CO_3)				Boric	anhy	dride	
Calcium carl	onate		9.6	(B_2O_3)			2.0

A soft glass of higher quality. Does not give up alkali under severe tests. A kindly working glass before the blowpipe, and very difficult to devitrify.

A RESISTANT GLASS,

suitable for pharmaceutical purposes, ampoules, etc.

		(3)	١.		
	1	Parts]	Parts
Sand		67.0	Sodium	carbonate	
Alumina (Al ₂ O ₃)		10.0			17.0
Calcium carbonate		12.5	Boric	anhydride	
Magnesia		0.5	(B_2O_3)		8.0
Potassium nitrate		1.0			

This glass is intermediate in hardness between soft glass and combustion-tubing, is highly resistant to chemical action, withstands changes of temperature well, and should be a very suitable glass for high-class beakers, flasks, etc.

GLASSES FOR COMBUSTION-TUBING.

		(4	4).		
	1	Parts	1		Parts
Sand		68.2	Sodium	carbonate	
Alumina (Al ₂ O ₃)		6.2	(Na ₂ CO ₃)		5.5
Barium carbonate		8.8	Boric	anhydride	
Calcium carbonate		13.0	(B ₂ O ₃)		5.5
Potassium nitrate		4.3	Calcium flu	oride	

This glass resembles Jena combustion-tubing very closely This glass resembles Jena combustion-tubing very closely indeed. It has practically the same fusing-point. It fuses on to Jena glass perfectly, and is indistinguishable from it before the blowpipe and in its behaviour on prolonged heating below its fusing-point. The presence of the small quantity of calcium fluoride facilitates the incorporation of the ingredients. The sodium carbonate can be reduced to 1.34 part, provided 7.93 parts of anhydrous borax be used in the place of boric anhydride.

		(5	5).		
Sand]	Parts 68.2	Sodium	carbonate	Parts
Alumina (Al ₂ O ₃) Barium carbonate		6.2	(Na ₂ CO ₃)		5.5
Calcium carbonate	• • • •	8.8 14.2	Boric (B_2O_3)	anhydride 	
Potassium nitrate		4.3			

This glass is practically of the same composition as (4). It is not so easy to make or to work, but it does not become so opaque as Jena combustion-tubing on prolonged heating. As in No. (4), the proportions given for sodium carbonate and anhydrous borax can be substituted for the figures for sodium carbonate and boric anhydride.

MINERS'-LAMP GLASSES.

			i).			
		Parts				Parts
			Calcium car			0.6
Alumina (Al ₂ O ₃		1.0	Potassium r	itrate		3.0
Arsenious	oxide		Sodium	carbon	ate	
(As_2O_3) .		2.0	Na_2CO_3			14.0
Antimony	oxide		Boric	anhydri	ide	
$(\mathrm{Sb_2O_3})$.		1.0	(B_2O_3)			
A colourless an of temperature e				ng rapid	l eh	anges

		(7).			
		Parts			Ι	Parts
Sand		65.0	Calcium ca	rbonate		0.6
Alumina (Al	2O3)	1.0	Potassium 1	itrate		3.0
Arsenious		.do	Borax			
(As_2O_3)		2.0	(Na ₂ B ₄ O ₇)		26,68
Antimony	oxi	de	Borie	anhydri	de	
(Sb_2O_3)		1.0	(B ₂ O ₃)			5.5

The same glass as (6), but the ingredients have been varied to avoid the use of so much boric anhydride, which is at present apparently difficult to obtain on a commercial scale.

Resistance-glass.

(8).						
	,Parts (Parts		
Sand		65.5	Sodium	carbonate		
Alumina (Al ₂ O ₃)		$^{2.5}$			10.2	
Magnesia (MgO)		5.0	Borax	anhydrous		
Zinc oxide (ZnO)		8.0	$ (Na_2B_4O_7)$		13. 0	

A glass almost identical in its general behaviour with Jena resistance-glass; withstands changes of temperature well, but, like Jena, is not suitable for working before the blowpipe. It darkens and tends to devitrify; operations—such, for instance, as sealing side tubes into flasks—are difficult, if permanent and neat joints are required. Formula No. 5, recommended for pharmaceutical purposes, ampoules, etc., may be substituted for the resistance-glass with advantage, as the ampoule-glass lends itself very well to blowpipe-work, and is also especially resistant chemically.

chemically.

ALTERNATIVE FOR COMBUSTION-TUBING.

(9).						
		Parts	1	Parts		
Sand		72.0	Magnesia (MgO)	. 0.5		
Alumina (Al ₂ O ₃)		10.0	Sodium carbonat	е		
Calcium carbonate		11.0	(Na ₂ CO ₃)	. 11.2		
Potassium nitr	ate		Borax anhydrou	S		
(KNO ₃)		3.0	$(Na_2B_4O_7)$. 7.2		

This glass is capable of withstanding high temperatures and rapid changes of temperature; works well before the blowpipe, and is free from the chief defect of Jena glass—namely, the readiness with which if becomes cloudy, and finally quite opaque after prolonged use.

By slight modifications of this formula almost any degree of bardees can be obtained.

of hardness can be obtained.

In formulas (8) and (9) substances such as magnesia (MgO) and zinc pxide (ZnO) can be added in the form of carbonates if the actual percentages of MgO and ZnO respectively present in the carbonates are known.

SOFT SODA GLASSES

suitable for tubing and for x-ray bulbs.

			(1.	U).				
]	Parts					
Sand			68.0	Potassium	nitrate			
Alumina (A.	2O3)		4.0	(KNO_3)		14.5		
Calcium `	carbon	ate		Sodium	carbonate			
$(CaCO_3)$			12.8	(Na ₂ CO ₃)		26.0		
(11).								
70 1 1								

Donta 1	
Sand 68.0 Calcium carbonate 1 Alumina (Al_2O_3) 4.0 Potassium carbonate (K_3CO_3) 10.0	.2.8 .6.0

These glasses do not lose their easy-working qualities after repeated heating and blowing, and are plastic over a long range of temperature. They require a temperature of at least 1,400°-1,500° C. for complete incorporation of the ingredients in order to obtain that homogeneity which is necessary for resistance to rapid changes of temperature and ease of working before the blowpipe.

No. (10), containing partassium nitrate, is considered the

No. (10), containing potassium nitrate, is considered the better of the two, and is more easily incorporated.

Inventions Which have Become Public Property.

XI.

[Continued from The Chemist and Druggist, April 17.]

Sidonal.

Piperazine quinate. Uric-acid solvent in gout. Trade-mark: No. 229305, registered in 1900 by Benno Jaffé & Darmstaedter, Berlin. Removed from the

register in 1914.

PATENTS: No. 11420 of 1899, "Manufacture of Piperazin Quinate and Quinates of Piperazin Derivatives and their Alkali Salts," granted to the above-named firm. This became void in the seventh year. The corresponding United States patent is 665879 (1901).

The following is one of the processes given in the

specification of the British patent:

Equivalent quantities of piperazine and quinic acid are dissolved in a minimum quantity of water, and the solution is evaporated as much as possible on a water-bath. The remainder of the water is removed by repeated evaporation with a small quantity of alcohol, the residual salt being dried in vacuo.

Somatose.

Employed as a nutrient in Semi-digested protein.

wasting diseases.

TRADE-MARKS: Nos. 215685 (Class 3) and 222797 (Class 42), registered in 1898 and 1899 by the Farben-

fabriken vormals F. Bayer & Co., Elberfeld. Registrations renewed in 1912 and 1913 respectively.

PATENTS: Nos. 1897 and 3391 of 1898, "A New Process for the Production of Albumoses," granted to the above-named company. Both patents were in force for the whole period of fourteen years.

The examples given in patent 1897 of 1898 are as

follows :

A. A mixture prepared from 100 kilos. of meat-fibre free from fat and glue, 2,000 kilos. of water, and 30 kilos. of oxalic acid is heated to about 90° C. in a vessel which is enamelled or covered with lead and provided with a stirring-apparatus. The mass is kept at that temperature for about fifteen hours. After this time it is neutralised with slaked lime or lime-water, energetically boiled, and finally filtered. The pale-yellow filtrate thus obtained is evaporated to dryness.

In example B carbon dioxide is used and the heating conducted in an autoclave, in C tartaric acid is employed, in D the sodium salt of oxalic acid, and in E the sodium salt of tartaric acid. The examples given in patent 3391 of 1898 use (1) sulphurous anhydride and casein, (2) sulphuric acid and meat (3) phosphoric acid and casein, (4) boric acid and meat, and (5) bisulphite of lime and meat.

Sublamine.

Mercuric sulphate-ethylenediamine. A non-irritant substitute for mercury perchloride in hand-disinfection and surgical purposes.

TRADE-MARK: No. 238066, registered in 1901 by the Chemische Fabrik auf Actien vormals E. Schering,

170 Müllerstrasse, Berlin.

PATENTS: No. 5981 of 1900, "Improved Antiseptics," granted to the above-named company. The patent became void in the ninth year. The United States patent is 726126 (1903).

The British patent gives the following among the

examples:

Mercury Sulphate Ethylenediamine.-To a mixture of 100 grams of mercury sulphate and 50 c.c. of water is gradually added 60 c.c. of 90-per-cent, ethylenediamine and gradually added to each of species entylendamine and 100 c.c. of water while cooling and shaking. Then to the clear solution 1½ litre of 90-per-cent. alcohol is added, whereby an oily precipitation takes place, which shortly becomes solid. The liquid is sucked off and the filtrate washed with alcohol.

Tannalbin.

Albumen tannate. Intestinal disinfectant.

TRADE-MARK: No. 216134 ("no claim for 'Tann'"), registered in 1899 by Knoll & Co., Ludwigshafen o/R. Registration renewed in 1912.

PATENTS: Nos. 6140 and 13281 of 1896, "Improvements in the Manufacture or Production of an Albumen Tannin Compound," granted to the above-named firm. patents became void in the eighth and ninth years respectively. The United States patent is 563479 (1896).

The process given in the first British patent is as

follows

Ten kilos, of albumen and 20 kilos, of tannic acid are dissolved separately in cold distilled water, and the solutions are afterwards slowly mixed while being continually stirred. are atterwards slowly mixed while being continually surfed. The moisture being allowed to settle, the supernatant solution is decanted. The precipitate is then freed by repeated lixiviation from any surplus tannıc acid, and is afterwards filtered, pressed, and dried. It is afterwards finally heated during a period of from about six to ten hours at a temperature of about 110° C., or up to 150° C.

The second British patent is for a process which obviates the necessity of heating the product of the reaction. The precipitate is allowed to remain in contact with three times its volume of 90-per-cent. alcohol or twice its volume of 25-per-cent. hydrochloric acid before filtering, washing, and drying.

Tannigen.

Diacetyl tannin. Used in diarrhœa.

TRADE-MARK: No. 275300, registered in 1905 by the arbenfabriken vormals Friedrich Bayer & Co., Farbenfabriken vormals Elberfeld.

PATENTS: No. 1228 of 1894, "The Manufacture and Production of Acid Compounds Derived from Gallic Acid Anhydrides," granted to the above-named company. The Anhydrides, granted to the above hands part of patent was in force for the whole period of fourteen years. The corresponding United States patent is 533718 (1898).

The process of manufacture is thus described in the

British patent-specification:

One part of dry tannin is mixed with ½ part of glacial acetic acid and 1 part of acetic anhydride, and the mixture is heated ["at about 130°-140° C."—U.S. patent]. The tannin gradually dissolves. After six to seven hours the dark mass is poured in a thin stream into water, which is is continually stirred. A resinous mass separates, which is purified by washing with water until it is converted into a light-yellow powder, the water with which the mass is kneaded being frequently changed. The powder is filtered off, and washed on the filter with water until the washings show no colour.

The product is a mixture of the monoaceto and diaceto compound, and it is stated in the specification that the proportion of the latter can be increased if desired by using a larger quantity of acetic anhydride.

Tannobromin.

Dibromtannin and formaldehyde compound. Used as a disinfectant and astringent.

TRADE-MARK: No. 301275, registered in 1908 by the Actiengesellschaft für Anilin-Fabrikation, Berlin.

PATENT: No. 14213 of 1900, "Manufacture of Organic Bromo-compounds," granted to the above-named company. The patent became void in the ninth year.

The process of manufacture is thus given in the speci-

fication:

Thirty parts by weight of pulverised tannin gelatin (see Tanocol), or the corresponding quantity of the same product newly precipitated, is ground with 200 parts by weight of water, and while stirring well, 15 parts of bromine is added to the mixture, at common temperature; stirring is continued until almost all the free bromine has disappeared. The bromo-compound is filtered, washed, and dried in open air. dried in open air.

Tannopin [Tannon].

Hexamethylenetetramin-tannin. Used for its astringent and antiseptic action in the intestines.

TRADE-MARK: None appears to have been registered at

the British Office.

PATENTS: No. 10790 of 1897, "The Manufacture and Production of New Pharmaceutical Compounds," granted to the Farbenfabriken vormals F. Bayer & Co., Elberfeld, Germany. The patent became void in the thirteenth year. The patent in the United States is 607172 (1898).

The following are the methods of manufacture given in

the specification:

A cold solution of 3.2 parts of tannin in 20 parts of water is added while being stirred to a cold solution of 1.4 part of hexamethylenetetramine in 20 parts of water. An amorphous white precipitate at once separates, which, after the mixture has been stirred for some time, is filtered and pressed.

Methods of rendering insoluble and tasteless are given, such as heating for 1 to 1½ hour at 90°-100° C. A second example illustrates the use of formic aldehyde and ammonia in acting on the tannin.

A Tip in Labelling.

THE following method of labelling is the outcome of experiments conducted with a view to labelling bottles with labels satisfying the following conditions, viz. :

1. Ability to withstand as many solvents and corrosives as

2. Legibility.

Neatness and finish.
 Cheapness.

5. Ease and rapidity of labelling.

It is claimed that all these are satisfied as completely as

Lettering and Material Used for the Label.—Fairly stout opaque white glazed paper is the basis for the label.

Sp. CHLOR

Indian or liquid Chinese ink is used for writing in bold neat letters, as examples shown, the wording required. Aim at making as much of the label as possible visible

Spt.Chlorof.

at a glance. It is better to have a label two or three lines of lettering deep than to have a long label going half-way round the bottle. That is to say, bring all to the front of the bottle. B.P. paraffin wax completes the requisites.

Manner of Execution.—As stated above, neat bold letters are required in as compact a space as possible. Read the article on lettering in the C. & D. Diary, Having written your label, allow it to dry well. Then paste it on the empty bottle with starch or dextrin paste, which should not contain any acid preservatives. Again allow to dry. Now hold the bottle in the left hand underneath a Bunsen flame inclined at 45°. With the right hand hold a block of paraffin wax in the flame, and allow the melted wax to fall in drops all over the label. Put the block of wax down, and, holding the bottle in both hands, block of wax down, and, noting the bottle in both names, slowly rotate it over, and close to, the tip of the flame. Thoroughly melt the wax into the label. Remove from heat and allow to get quite cold. With a knife scrape all superfluous wax from the glass, almost, but not quite, up to the edges of the label. Any irregularities in thickness of wax even the label way be carefully payed down. ness of wax over the label may be carefully pared down. Now take a dry, clean cotton duster and polish the label. You will now have a polished distinct label, which has cost you the merest fraction of a penny, a few minutes' time only, and no patience. This label, which looks like opal glass more than anything, will be found to be quite unaffected by concentrated and dilute acids, alcohol, and most other liquids. Ether attacks it, and so very gradually do solutions of alkaline carbonates and bicarbonates. At any rate, it is more durable than most other attached labels, excepting glass, of course. It may be cleaned by rubbing with a clean duster and polishing. Instead of being only over the surface of the label, as are most other varnishes and finishes, the paraffin in this case becomes actually a part of the material of the label .-Robert W. Taylor.

Recent Radiology.

Wilhelm Conrad Röntgen, who twenty years ago first made practicable use of the x rays of the Crookes tube for diagnostic purposes, has just celebrated his seven-tieth birthday. This article deals with the evolution of the subject and the progress of radiology as reflected in Dr. Robert Knox's new book on the subject.

In 1872 Mr. Crookes commenced his experiments on "Repulsion Resulting from Radiation." Numerous papers, embodying the record of researches on this subject, were read before the Royal Society between this date and 1880. In these Mr. Crookes showed the effect of light and heat on the molecules of gases in atmospheres of various rarefactions, and he illustrated his observations by the "radiometer" and the "otheoscope," instruments of great beauty and delicacy. He showed that it was possible to measure the force of motion among the molecules of gases, and incidentally he showed how to produce vacua of far greater rarefaction than had ever before been obtained. He reduced air to a fifty-millionth of an atmosphere, and in a cubic centimetre of such an atmosphere he computed there were contained no less than twenty billions of molecules. Later still he showed that gases, when very highly rarefied, lose most of the ordinary properties of matter, and pass into a fourth or ultra-gaseous condition.—The Chemist and Druggist, March 17, 1888. Chemist and Druggist, March 17, 1888.

and pass into a fourth or utra-gaseous condition.—The Chemist and Druggist, March 17, 1888.

Professor Röntgen's experiments are conducted in the following way: He takes a so-called Crookes pipe—viz., a well-pumped-out glass pipe with an induction current going through it—and by means of the rays which that pipe is emitting he photographs on ordinary photograph-plates. In contrast with the ordinary rays of light, those rays penetrate wooden and organic matter and other opaque substances, just in the same way as the ordinary rays of light penetrate glass. . . The Crookes pipe referred to is apparently one of Mr. William Crookes's for producing phosphorescence in vacuo. There is no mystery about that, but we learn for the first time that wood and flesh have become invisible in that light.—The Chemist and Druggist, January 11, 1896.

Any doubt regarding Professor Röntgen's discovery. . . has been amply dispelled by corroborative observation in England, France, and els-where. To-day we are able, through the courtesy of "The Lancet," to print a part of a hand in which the bones are seen distinct from the sur rounding muscle. It is evident from this that the discovery may be of great value in medicine and the arts, but it is yet too soon to speculate upon that development of Professor Röntgen's observations. There is, however.

it is yet too soon to speculate upon that development of Professor Rontgen's observations. There is, however, enough of purely theoretical interest in it to occupy attention, while certain statements have been made regarding Professor Röntgen's observations which are quite erroneous,

tion, while certain statements have been made regarding Professor Röntgen's observations which are quite erroneous, and require to be put aside before the importance of his research is properly appreciated. We therefore propose to describe as briefly as possible what Professor Röntgen has done in this department of research.—The Chemist and Druggist, February 1, 1896.

It was in 1895 that Wilhelm Conrad Röntgen, Professor at the University of Würzburg, discovered the x rays. The date of his paper, "On a New Kind of Rays," read to the Würzburg Physico-Medical Society, is December 28, 1895: the day of the discovery, "One day still fierce 'mid many a day struck calm" was in April 1895. Röntgen had been led up to it by Lenard, and Lenard, like the rest of the world, was following the lead of Sir William Crookes. The whole thing goes back to the invention of Crookes's vacuum tube, and starts there, and was advanced by the work of Stokes and others on fluorescence. Lenard, indeed, misses priority over Röntgen by the mere hairsbreadth, and by nothing more than that He had observed, working with a Crookes tube, that if a thin plate of aluminium were let into a little window cut in the tube, rays of some kind were still able, more or less, to pass through the aluminium: but what they could do after that he did not discover. In April 1895 came the final experiments of Röntgen. He made his workroom perfectly dark, and he covered his tubo with blackened cardboard. Still he found that rays of some kind, invisible but not inactive, were passing through the tube, and were able to set up covered his tubo with blackened cardboard. Still he found that rays of some kind, invisible but not inactive, were passing through the tube, and were able to set up fluorescence on the surface of a screen coated with platino-cyanide of barium, a sort of "Balmain's luminous paint." And if he turned the back of the screen toward the tube, still the barium salt showed fluorescence. Then he tried the effects of holding, between the tube and the screen, diverse objects—sheets of paper, playing-cards, blocks of wood, strips of metal or of rubber, and so forth. And he found that these invisible rays had their likes and their

They passed more easily through a thin layer of dislikes. They passed more easily through a thin layer of this or that substance, and less easily through a thick layer. If they passed easily through an object, the shadow of that object cast on the screen was faint; if they passed less easily, it was dark. Then, in the course of these experiments, came the supreme experience, the great moment of his life, when he held his own hand between the tube and the screen, and saw on the screen the shadow of his hand, the screen, and saw on the screen the shadow of his hand, but a shadow such as no man from the beginning of the world had ever seen or dreamed of sceing: the darker shadows of the bones, in the fainter shadow of the soft tissues. Moreover, in the shadow of each bone he could distinguish the hard wall of the shaft from the delicate network of bone-threads inside the shaft.

Then felt he like some watcher of the skies When a new planet swims into his ken.

A few weeks later he used dry-plates instead of the screen. and thus obtained permanent x-ray pictures. It is a good story, worth going on with it, if there were room here. For the wonderful advances made, since 1895, along a dozen lines of hard scientific work, we have Dr. Robert Knox to teach us.—"The Times" Literary Supplement, April 15,

These observations of "The Times" are quoted from a review of Dr. Robert Knox's book on "Radiography, x-Ray Therapeutics, and Radium Therapy" (Black, 25s.), of which a preliminary note appeared in the C. & D., March 13, p. 97. The first of the quotations from THE CHEMIST AND DRUGGIST was written on the occasion of a visit to the Crookes laboratories, and it fixes the fact that at that time the Crookes tube had not been put to any economic use. The other quotations mark the beginning of pharmaceutical interest in radiography, for when Rontgen's discovery was announced many pharmacists of scientific bent immediately took up work with x rays, and from the first practice of radiography has been an important scientific side-line in many pharmacies. Mr. F. Harrison Glew, of Clapham, is one of the pharmacists who are recognised in radiographic circles as specialists in the subject, and he contributes the observations which

The importance of scientific research as a means of alleviating human suffering is well exemplified in the rapid rise and progress of the new science of radiology, which deals mainly with x rays and the radiation from radio-active substances. No greater reward can come to men of science than the satisfaction that they have helped to attain such a result; to have provided one or a few bricks in the walls of the temple of knowledge and so improve the conditions of existence should be the chief aim; the foundation-stones, however humble, are not the least important. We Britons may well be proud of the pioneer work which Sir William Crookes did, thereby providing the groundwork for Professor Rönt-gen's discovery of x rays in 1895. Notwithstanding the present time of international strife, it is a matter for congratulation that Professor Röntgen attained his seventieth year last month. Science should be cosmopolitan. These two names will live for ever as those of benefactors of mankind; fortunately both these men of science have lived to see some of the fruits of their labours, although neither could see the full importance at the time.

By the scientific use of these invisible rays much information has been gained about the structure and nature of atoms. It is now known that every element is influenced by x radiation, and that while so excited each gives out secondary characteristic radiation which is just as distinctive as the ordinary visible lines in the spectrum. It has recently been demonstrated that x rays are similar to light-waves, the former being about 1,000 times smaller in wave-length.* This is proved by the diffraction-effects produced when x rays pass through crystals; this also gives valuable information about the structure of crystals. Thus the boundaries of knowledge

are being extended in many directions, and it is impossible to foresee the ultimate outcome tor science and mankind.

The publication of Dr. Robert Knox's "Radiography, x-Ray Therapeutics, and Radium Therapy" marks the astonishing progress that has been made in the science of radiology as applied in connection with medicine and surgery. It is fortunate that Dr. Knox, with his unrivalled experience and practical knowledge, has been willing to devote his time to the production of such a valuable work of reference. It deals with every branch of the subject, and its 406 pages contain numerous excellent illustrations, the positive and negative aspects being shown in each case side by side. This is a new departure which will be appreciated by radiographic workers and diagnosticians. Fortunately retouching, so evident in many works, has been avoided, thus much increasing the value of the work; all typical cases of fractures, dislocations, and diseases of bones are clearly illustrated, including the most recent developments of the use of x rays in diagnosis of diseased conditions of the soft tissues, thoracic and abdominal, mainly the digestive tract which are not directly made visible. If, however, the patient partakes of a meal containing a sufficiency of bismuth carbonate, the process of swallowing can be seen on the fluorescent screen, the size, shape, and movements of the stomach and bowels are rendered evident, giving much valuable information. All the chief methods of locating foreign bodies are described at some length-very welcome details at a time like the present for military hospitals, where radiography is doing splendid service and has undoubtedly saved many lives, and much otherwise inevitable suffering has been avoided.

The use of radium and x rays in therapeutics is now firmly established. Dr. Knox's illustrations show that much useful work has been accomplished. Research is going on in this subject, and is bound to result in a larger proportion of cures. Illustration A, plate lix., leaves no doubt about the amenability of rodent ulcer to this form of treatment. The essential part of this is reproduced.



RODENT ULCERS ON LEFT SIDE OF FACE. These rapidly healed after radium exposures, and remained healed.

A valuable section of the book by Mr. C. E. S. Phillips (physicist) deals with the chief properties of radium, and gives modes of preparation for therapeutic work.

The great advances which have been made in apparatus for the production of x rays are fully demonstrated in

the book; showing that in some cases instantaneous exposures can now be made.

The Coolidge tube is a new departure which makes possible the generation of rays of any selected degree of penetration over a greater range than hitherto, with the advantage that the quality of the radiation required can be maintained as long as desired. With the more powerful generators now in use the accurate measurement of exposures becomes of increasing importance. All the chief methods are described and compared by Dr. Knox, showing that there is room for further improvement in this direction. Those medical practitioners who do not yet know the value of x rays and radium would find Dr. Knox's volume a revelation, and to all workers in the subject it is a most welcome text-book and reference work.

STERILE SALINE SOLUTIONS. — Toege ("Jour. Pharm. Chim.") suggests that sterile solutions of common salt for hypodermic injections may be rapidly prepared by heating a solution of hydrochloric acid to boiling and neutralising by dilute sodium-carbonate solution while still hot, using phenolphthalein as indicator.

^{*} Crookes imagined and said so many years ago; indeed, his prevision carried the idea of wave-motion in immaterial manifestations to telepathic intercommunication, and even suggested that extremely attenuated wave-motions exist in spiritual regions. The realisation, one after the other, of this scientific secr's statements "makes one to think."—Editor C. & D.

Pharmacy in Italy.

Italian pharmacies are noted for their artistic furnishing, and the practice of pharmacy is rigorously controlled by law. Many religious houses, from the Vatican downwards, include a pharmacy, and a description of one of these, by a British pharmacist who has visited it, is given here.

A T the present time the eyes of the world are turned to Italy, the only one of the greater European Powers which so far has succeeded in maintaining neutrality and an honourable peace. In the matter of medicinal and pharmaceutical products it is also the only European non-belligerent nation which during the past half-century has developed appreciably the production of these, so that during the past eight months we have obtained from that country many chemical and pharmaceutical supplies which otherwise would have been unobtainable in Europe. Whether all these have been of Italian manufacture or not is another story. Italian pharmacists have also made remarkable strides during the period in education, legislation, and organisation, so that they are a compact and well-protected body, able to say "Hands off!" to pharmacists, of whatever nationality,



Fig. 1.

who are not qualified in accordance with Italian law. Some of the world's most noted chemists have had their early training in Italian pharmacies, and the influence of their association is observed in the progress of pharmaceutical chemistry as reflected in the Italian Pharmacopæia, which now compares most favourably with those of other countries. In the actual practice of pharmacy Italian pharmacists are not unlike French pharmaciens, especially in regard to international custom, Italy being one of the world's favourite meeting-grounds for health-seekers, art-lovers, and sight-seers. The country's eminence in art is shared by many of the pharmacies, which are not excelled in this respect elsewhere. We give to-day two examples which fairly illustrate the manner in which Italian pharmacies are equipped and fitted.

Fig. 1 shows the interior and frontage of Signor Renzo Tettamanzi's English Pharmacy, 75 Via Garibaldi, Viareggio. The front of this pharmacy is constructed in beautiful pink marble decorated with green marble,

as may be noted in the lower part of the figure. The interior view is of the retail department, behind which is a wide dispensing department, besides a consultation-room, laboratory for the manufacture of galenicals and other preparations, with provision for analyses and for sterilising surgical requirements. There are also several warehouses for stock of all kinds. Signor Tettamanzi is experienced in British pharmacy and is familiar with our tongue, and his international clientèle consists very largely of English families.

Many Italian pharmacy interiors are palaces of art, or appeal to the artistic sense not only on account of the



Fig. 2.

correctness of their architectural features, but on account of the specimens of Italian art which they frequently contain. The ancient and historic pharmacy of Santa Fosca in Venice is one of the finest examples, and is shown in fig. 2. The director of this pharmacy is Dr. G. Ponti, and it is owned by the firm Fernando Ponci. Besides much beautiful carving and statues, the pharmacy contains a fine collection of Italian-ware pots and vases, which are displayed to the best advantage.

In the good old days, before professions were specialised and split up as now, when the priest was prophet, physician, and pharmacist, there was no need of State doctors or chemists. The priest took charge of his flock, the poor paying in reverence and the rich in benefices. Many monastic pharmacies exist in Tuscany, notably in the vicinity of Florence, where may be seen three of outstanding merit. The monastery of San Marco, erected in 1437 by Cosimo, decorated by Fra Angelico, contains one of the most solid and sombre pharmacies extant, and fitting well in with Savonarola's austerity. Santa Maria Novella, one of the most ornate and gorgeous pharmacies



FIG. 3.-St. MARK'S CHURCH, FLORENCE.

in the world, designed by Michael Angelo and executed by equally famous craftsmen, is still in active operation and famed further than Florence for its aqua antisterica, strongly aromatic, and its famous alkermes, rich, ruddy, and spirituously aromatic.

The pastoral monastery of Certosa stands on a hill perched high above the nestling villages, approached by a steep ascent devoid of shade, so that on a warm day the first call is at the pharmacy for a pick-me-up. Like all up-to-date monasteries, it is famous for its liqueur,

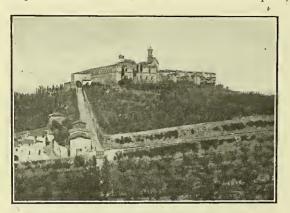


FIG. 4 .- MONASTERY OF CERTOSA.

which the visitor may have in the popular shades and flavours, green and yellow, and deliciously aromatic. In absorbing this comfort and consolation, writes an English pharmacist who visited it, I was reminded that the Catholic Church, according to one of its wittiest divines, has ever been in the van of this world's progress: in its darkest days it discovered his soul and the panacea therefor; in the middle ages it developed and appealed to his intellectual and artistic taste; and now in these decadent days, which leave it no other function to perform, it titivates his palate and aids digestion, leaving at the same time a comforting and consoling glow.

The pharmacist was an importation. The monks were above making up prescriptions, reserving themselves for

the higher functions of liqueur-making.

A little girl from some village below handed over an order for ol, ricini, which was carefully weighed in and

floated on peppermint.

"We are not a pharmacy under the meaning of the Act—not a State dispensary," said the pharmacist to me. "The Church and State do not yet see eye to eye, and the idea of being compelled to stock State requirements keeps us outside. We nevertheless supply most local needs, though this morning I had to send by tram three prescripthough this morning I had to send by train three prescriptions to Florence for dispensing. Our stock here varies but little with the years. Though modern medicals seek to display their modernity by countenancing every trifling upstart treatment, we are self-supporting; but that reminds me of the pitfalls besetting those who seek support from alien sources. A certain monastery which shall be nameless, as it was needy, once determined to make a world-wide appeal for support. It had, however, tackled word-wide appear for support. It had, however, tacked more than its resident linguists could adequately manage. What the Italian said was 'That the Misericordia Brethren' (Brothers of Mercy) 'took in all kinds of cases irrespective of their creed.' What their English translairrespective of their creed. What their English translation said was 'That the Miserable Brethren harbour all sorts of diseases and are absolutely devoid of religion.

This reminded me of an enterprising chemist who, being chemist to the Hospital of the Santo Spirito, or Holy Spirit, and desirous of Anglo-Saxon patronage, boldly advertised the fact in English that he was "Chemist to the Holy Ghost"! But to return to pharmacy proper, we had by this time consumed sundry liqueurs by way of sampling the stock, and the farmacista was getting talkative-too talkative for accurate reporting; in other words, he had started on that unfailing pharmaceutical topic of grievances. "Chemists are the Esau of the professions in Italy" (as elsewhere). "No hope of betterment from Parliament or people, yet we as a profession have the lives of the people in our hands." I dissented with out effect. He was on his hobby and would ride it to the

"Four years' University for what? To be every man's slave without ever the prospect of being your own master! It's a debasing of one's intellect to serve such

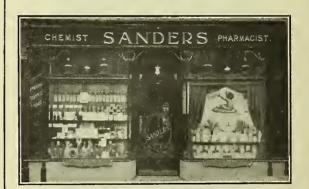
"But—why do it? What do the Holy Fathers say? Have you spoken to them thus? Do they preach contentment to you?

"Four years' University study and training, to be imprisoned daily in a monastery from nine to five, attending to the petty wants of petty people. No! It is a degradation not to be tolerated when—."

"You have sufficient spiritual stimulation within you to kick!" I had now of necessity hurriedly to leave the pharmacy and pharmacist, and found myself being taken over the monastery proper by a jocund-looking, and at the same time saintly, old monk, who, far from com-plaining, enthused over his calling. High above the world in thought as in deed, he in his long life had so mortified the flesh that it had no further claim on him, and ever and anon he had to drag himself back from his dreams to reply to some query of mine. He really lived a life of abstraction from this vain world, and after finishing our round of the monastery, when parting from him at the gate, I could not but venture to ask him concerning the pharmacist. With a far-reaching effort he seemed to grasp my inquiry, and dismissed it with the reply, "The pharmacist? Oh! he is a man from below!

Chemists' Windows.

Photographs of windows sent to the Editor for reproduction should be accompanied by notes on how the displays were arranged,



In a Country Town.

The above window is that of Mr. A. Wallace Sanders, dispensing chemist, Fore Street, Chard, and it is an excellent example of enterprising and profitable use of the chemist's window in a small country town, where one has the same people to deal with year in and year out. Mr. Sanders finds a window of one class of goods to pay best—e.g., a hair window showing hair-washes, shampoos, brushes, etc.; a tooth window, a toilet window, an agricultural window, etc. This is better in a small town than an all one preparation, such as a huge show of hair-brushes only, or cough-mixture only. The reason is obvious: fewer people require a hair-brush at one time than in a big city.

The window to the right is a very effective display of Kepler's extract of malt, emphasising its use for humanof Kepier's extract of mait, emphasising its use for lumanising milk. Mr. Sanders took out the shelves for this, using only the lower one. The background was of canvas with a beautiful coloured picture of the child. On the, shelf was a bottle of milk, a jug of cream, a jug of water, a bottle of Kepler, and a feeder full of food (all dummies except the water). The cards read: "Take milk, add a little except the water). The cards read: "Take milk, add a little cream, some water, some Kepler malt extract; mix, and the food is ready." There were also two vases containing ears of barley, and the rest consisted of cartons and bottles. Everything was lent by Burroughs Wellcome & Co., and the whole makes a very useful display.

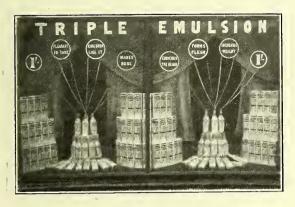
The window on the left was devoted to agricultural remedies and sundries. The top shelf was devoted to Devonshire wilk, the second had droubles of various kinds on it and

oils; the second had drenches of various kinds on it, and, as it was autumn, wheat-dressing. The next lower shelf

death.

was dressed, as was the floor of the window, with an assortment of veterinary sundries—castration-knives, drenching horns and bits, balling-guns, bull-rings, etc.—all sent on sale or return by a sundries' house. Foot-rot lotion and pastes, disinfectants, etc., were also shown, and everything had a showcard with price. The centre card was worded:

"Get your cattle-medicines here; over fifty years' reputation. My personal guarantee with each remedy."



An Emulsion-window.

An Emulsion-window.

Simple and effective, one might call the Triple Emulsion display. "Triple Emulsion" in white cut-out letters with red shading are stuck on window; underneath these are affixed the eight round discs of paper (demy) having a red ground and white lettering. Attached to these, on the back, are streamers of red, white, and blue ribbon, which are ultimately pinned on the neck of the bottles of the actual emulsion, which form a nicely arranged group in the centre of each window-pane; these are flanked on both sides by arrangements of dummy cartons. The whole is backed up by curtains, used, by the way, over and over again in other displays. The wording of each disc is so plain that I need not give it in detail. The red of the discs and the red on both labels and cartons combine to give that completeness which makes window-shows so effective.

This window is by Mr. H. A. Martin (Leicester).

This window is by Mr. H. A. Martin (Leicester). 'We hope to publish a series by him and others as space permits.

A Book on the Art.

In The Chemist and Druggist Diary, 1915, p. 201, it is mentioned that we have a book in the press on Chemists' Windows. At this moment it is being printed, and will be in the binders' hands by the beginning of May. The full title of it is-

Chemists' Windows, an illustrated treatise on the art of displaying pharmaceutical and allied goods in chemists' shop-windows, with chapters on Ticket-writing, the Mechanics of Moving Devices, and Business-promoting

The art of displaying chemists' goods has not until now been embodied in a companion book to "The Art of Dispensing," yet it may be more important to a majority in the business than is the latter, and certainly more profitable. In the new book we present a systematic exposition of the subject. The materials have been drawn mainly from The Chemist and Druggist, the information having been co-ordinated, expanded, and supplemented so as to demonstrate the principles of the art and the manner in which successful schemes are evolved. In preparing it we have also endeavourod to present as many ideas as possible, leaving the elaboration to the chemist in accordance with the business possibilities of his district and his shop resources.

It is not necessary to say more about the book at present, except that it will contain 200 illustrations in over 200 pages of text. It will be published at 3s. 6d. net, by post 38. 9d., and orders for it may be sent to the Book Department of The Chemist and Druggist, 42 Cannon Street, London, E.C. The present note is specially intended for chemists in the Colonies and Dominions, as the book will be ready by the time we receive their orders with the money if sent on reading this.

English and Welsh News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

The Committee of Leicester Pharmacy Athletic Club has decided not to arrange matches during the coming summer on account of the war. The balance-sheet for 1914 shows a balance in hand of 2l. 14s. 2d.

The abridged prospectus for the summer session of the Middlesex Hospital Medical School, Berners Street, London, W., is now obtainable. The session began on April 20, and the winter session opens on October 1.

The Hants Licensing Committee has confirmed an off-licence granted to Mr. F. D. Coghlan, chemist and drug-gist, manager to the Timothy White Co., Ltd., 17 and 18 High Street, Cowes, an undertaking that only medicated wines would be sold being given.

We are asked to remind London chemists that the dinner of the South-Western Pharmacists' Association in aid of the Belgian Doctors' and Pharmacists' Relief Fund is being held on April 28. Mr. E. A. Atkins, 71 East Hill, Wandsworth, will be glad to receive early intimation from those who intend being present. tickets are 7s. 6d. each.

The Cheltenham Traders' Association met on April 19 to endeavour to arrange for uniformity in closing-hours. It was stated that some confusion and inconvenience to the public had been caused by individual voluntary action, and it was suggested that 7 P.M. is a suitable hour for closing. Mr. H. B. Clark, of Beetham & Clark, chemists and druggists, The Promenade, pointed out that, with respect to chemists, any suggestion to close at 7 P.M. or 7.30 P.M. is out of the question. The very long hours which formerly obtained in the chemists' business had been considerably reduced in recent years by voluntary action, but at present the exigencies of the business necessitate keeping open to 8.30 p.m. or 9 p.m. The meeting decided to leave open the question of compulsory or voluntary closing, and a resolution of an elastic character was passed.

Shops Act.

The Home Sccretary has confirmed an order for chemists and druggists of York to close each Wednesday at 1 P.M., Thursday to be observed as the early-closing day when Christmas Day falls on Wednesday.

A closing order was issued by the Rowley Regis Urban Council on April 15 for chemists and druggists to close at 8.30 P.M. on Mondays, 8 P.M. on Tuesdays and Wednesdays, 1 P.M. on Thursdays, 9 P.M. on Fridays, and 11 P.M. on Saturdays.

Birmingham.

As a result of a recent house-to-house distribution of advertising booklets, there has been a spurt in the sales of Mother Seigel's syrup.

At the suggestion of Mr. Wilfrid Hill, the leisured classes in the city are taking steps to assist in the production of munitions of war.

A Birmingham lady dentist, trading at Small Heath and Walsall as the Midland Counties Teeth Association, held a meeting of creditors last week.

Shop-assistants are becoming very scarce in the city, and some traders are finding it exceedingly difficult to fill vacancies. It is not unusual for a youth to inform his employer that he has enlisted and desires to be set free at once.

Dr. Hedley Tomlinson, Dunelm, son of the late Mr. Tomlinson, dentist, and at one time in business as a chemist in the pharmacy now occupied by Mr. Henry Howes, Bristol Street, has met with a serious motor accident.

"M. D.," in the "Birmingham News" of April 17, advises, for centipede bites-often severe and painfulthe early application of solution of ammonia. painful cases the sufferer is advised to " see a chemist or a medical man.

A special call on the local municipal employés to assist in the production of war munitions has necessitated a

curtailment of the municipal services. A circular has been issued inviting the public, and especially the shopkeepers, to help in keeping the streets free from litter. The latter are asked to assist by refraining from sweeping out their shops into the roadways.

The list of subscribers to the Birmingham Friends' Motor-ambulance which has been despatched to Dunkirk includes Alderman Clayton (50l.), Mr. Harold Southall (20l.), Mr. L. Southall (10l. 10s.), Mr. Alfred Wilson (20l.), Mr. Albright (10l.), Mr. Wilfrid Southall (10l.), and Mr. Gilbert Southall (10l.). The members of the Cadbury family also subscribed largely to the fund.

Mr. C. E. Cresswell, Secretary of the Society of Chemical Industry, who is not unknown in Birmingham, as he was at one time engaged at Chance's Chemical Works, Oldbury, delivered a lecture before the local branch of the Society on April 15 on "The Sources of Potash." There was a large attendance of members. Previous to the meeting Mr. Cresswell was entertained to dinner at the Whitehouse Hotel.

West Bromwich.

Measles has been very prevalent in West Bromwich and district, but the epidemic has now subsided.

Intending subscribers to the Belgian Doctors' and Pharmacists' Relief Fund in this district should forward their contributions to Mr. Rex Allen, 53 High Street, without further delay.

The Executive Committee of the local Pharmaceutical Association has recommended the adoption of the following minimum prices until further notice:

ing minimum prices until further notice:

Andrew's liver-salts, $4\frac{1}{2}d$, and $8\frac{1}{2}d$.; Allinson's Food, 6d., $11\frac{1}{2}d$., and 1s. $4\frac{1}{2}d$.; carbon, $3\frac{1}{2}d$. per lb.; laundry borax, $3\frac{1}{2}d$. per lb.; magnes. citrat. eff. (so-called), 1 oz. 1d., 4 oz. $3\frac{1}{2}d$.; sodii sulph. eff., 1 oz. $1\frac{1}{2}d$., 4 oz. $5\frac{1}{2}d$.; tragacanth, good white powder, 10d. per oz.; paraffin. liq. B.P., 8 oz. 11d., 4 oz. 6d.; glycerin (for external use) and glycerin and ross-water, 4 oz. $4\frac{1}{2}d$., 2 oz. $2\frac{1}{2}d$., 1 oz. $1\frac{1}{2}d$. (weight); medicinal glycerin, 1 oz. 2d., 2 oz. $3\frac{1}{2}d$., 4 oz. 6d. (weight); potass. chlor. pellets, 4d. per oz.; sacchar. lact., 4 oz. 4d., 1 oz. 1d.; gold chloride (15-grain tubes), 2s.; sodium nitrate, $2\frac{1}{2}d$. per lb.; phenacetin and phenacetin-compound tabloids, 25 10d., 100 2s. 6d.; phenacetin tablets, 4d. per doz., 25 6d., 100 2s.; oxalic acid, 1 oz. $1\frac{1}{2}d$., 8 oz. $2\frac{1}{2}d$., 4 oz. $4\frac{1}{2}d$., 1 lb. 1s. 3d.; methyl salicylate, 9d. per fluid oz.; reatsfoot oil, 8d. per pint, 5s. per gal.; acid. acctosal. neatsfoot oil, 8d. per pint, 5s. per gal.; acid. acctosal. tablets, $100 \ 2s$. 3d., $25 \ 8d$., 4d. per doz.; saccharin tablets, $\frac{1}{2} \ \text{gr.}$, $100 \ 6\frac{1}{2}d$., $200 \ 11\frac{1}{2}d$., $500 \ 2s$. 3d.; mineral waters, Apenta 1s. 3d., Hunyadi 1s. 1d.

Manchester.

The demand for radium-treatment at the Radium Department of the Royal Infirmary has been so great that it has been decided to expend 5,000l. of the funds in the hands of the Committee in procuring a further supply of radium.

Chemists in Withington, Didsbury and district have been closing their pharmacies at 8 P.M. on Mondays, Tuesdays, and Thursdays; 9 P.M. on Fridays, and 10 P.M. on Saturdays, since April 5. The half-holiday is on Wednesday, as usual. The chemists in other districts are following suit on account of the restricted lighting and darkened thoroughfares.

Sheffield.

Mr. J. T. Ellinor, chemist and druggist, has arranged to continue the business for so long carried on by his father, the late Mr. G. Ellinor, Ph.C.

Sheffield Guardians have unanimously re-elected Mr. G. T. W. Newsholme, Ph.C., F.C.S., as Chairman of the Board. This is the eighth occasion on which Mr. Newsholme has been elected to the position.

Private Joffe, R.A.M.C., of Kimberley, South Africa, who has been stationed in Sheffield, and has been taking practical dispensing at the Firvale Dispensary, has been recommended for promotion as sergeant-dispenser. He is leaving Sheffield for Aldershot to join his unit. Private Joffe came to England to serve his apprenticeship and take the Minor examination. He intends to resume his studies on the conclusion of the war, and will ultimately return to his father's business in Kimberley.

Contracts for Drugs, etc.

The following information regarding contracts for articles in which our subscribers are interested has been received since our last number :

Barnes District Council.—Burt, Boulton & Haywood, Ltd., disinfectants.

Bognor Urban Council.—Mr. C. T. Cooper, chemist,

disinfectants.

disinfectants.
Government Contracts.—India Office, Store Department.—
Brushes: A. Reid & Sons, Tabard Street, S.E. Copper
Sulphate: Mond Nickel Co., Victoria Street, S.W.
Crucibles: Morgan Crucible Co., Battersea, S.W. Limejuice: L. Rose & Co., Worship Street, Finsbury, E.C.
Platinum: Johnson, Matthey & Co., Hatton Garden, E.C.
Spirits of Wine: B. Biggs & Co., Cannon Street, E.C.
Broadmoor Asylum (1915-16).—Drugs and Druggists'
Sundries: Corbun. Stacey & Co., Ltd., Commercial Road

Sundries: Corbyn, Stacey & Co., Ltd., Commercial Road

East, E.

East, E.

Prison Commission.—Soap: John Knight, Ltd., Silvertown, E.; Price's Patent Candle Co., Ltd., Battersea, S.W.

War Office.—Brushes: Association for the Blind, Northampton; R. Benson & Sons, Ltd., Birmingham; T. Chenery & Son, Scole; Wm. Cleghorn & Son, Walsall; H. T. Dunn, Gloucester; Chas. Hayland & Son, Ltd., Sheffield; G. B. Kent & Sons, Ltd., London; W. Kilmister & Co., Ltd., Lincoln; Lawton Bros., Hanley; C. H. Leng & Sons, Birmingham; S. Ludbrook & Co., Ltd., Mile End, E.; D. Matthew & Son, Ltd., Tottenham; Newton & Cook, Grange Road, S.E.; J. H. Pontifex, Ltd., Victoria Street, S.W.; W. M. Stratchan & Co., Ltd., Bury Court, E.C.; W. M. Vowles & Sons, Ltd., Stonehouse. Calcium Carbide: H. J. Cordwent, Bromley-by-Bow, E.; Elephant Chemical Co., Camberwell, S.E.; Inperial Light, Ltd., Battersea, S.W.; Lockerbie & Wilkinson, Ltd., Tipton; the Plios Co., Dalston Lanc. N.E. Chloride of Lime: United Alkali Co., Ltd., St. Helens, Lancs. Medicines: The British Drug Houses, Ltd., City Road, N.; Burgoyne, Burbidges & Co., East Ham, E.; Burroughs Wellcome & Co., Dartford: A. H. Cox & Co., Ltd., Brighton: Evans Sons Lescher & Webb, Ltd., Bartholomew Close, E.C.; H. & T. Kirby & Co., Ltd., Bartholomew Close, E.C.; H. & T. Kirby & Co., Ltd., Hove; Willows, Francis, Butler & Thompson, Ltd., Aldersgate Street, E.C.: May & Baker, Ltd., Battersea, S.W.; Parke, Davis & Co., Hounslow; Standard Tablet and Pill Co., Ltd., Hove; Willows, Francis, Butler & Thompson, Ltd., Aldersgate Street, E.C. Stretchers, Ambulance, etc. Alford & Adler, Newington Butts, S.E.; Burgoyne, Burbidges & Co., 1246, Coloman Street, E.C.; J. & A. Carter, Canden Town, N.W.; Chahners & Co., Redhill; C. Coleman & Co., Ltd., Edoswell Road, E.C.; Connaught Motor and Carriage Co., Ltd., Ling Acre. W.C.; Counity Sereen Co., Ltd., Edoswell Road, E.C.; Connaught Motor and Carriage Works, Motor-works and Garage, Ltd., Sandgate; S. Maw, Son & Sons, Aldersgate Street, E.C., and Tottenham Hall, Middlesex; J. Lockwood & Co., Ltd., Fingham, N.W.; H. Lebus, T Prison Commission.—Soap: John Knight, Ltd., Silver-own, E.; Price's Patent Candle Co., Ltd., Battersea, S.W. War Office.—Brushes: Association for the Blind, Northtown, E.; Street, E.C.

Hertford and Ware Joint Hospital Board.—Mr. J. H. S. Lewis, chemist, Ware, medical sundrics, drugs, etc.

Isle of Thanet Joint Hospital Board,-Mr. H. J. Davey

appointed chemist.

Marylebone Guardians.—Corbyn, Stacey & drugs; S. Maw, Son & Sons, druggists' sundries. & Co., Ltd.,

Nantwich Guardians have referred to their Finance Committee an application by Mr. Grice, contractor for drugs, for special consideration on account of the difficulties arising

Royal Portsmouth Hospital,-R. Pether & Co., Benger's

Food.

Sculcoates Guardians.—Mr. H. Leggott, chemist, Hull. drugs. Sayer, Sileox, Cuzner & Co., Ltd., Hull, surgical

Shrewsbury Corporation.—Henshaws, chemists, disinfectants.

Pituitary-extract Injection.

The inquest (C. & D., April 10, p. 35) regarding the death of Mrs. Woodman was concluded by the Sussex Coroner (Dr. Benson) at Willingdon on April 20. It will be recalled that at the first hearing on April 6 Dr. W. H. Willcox, F.I.C., etc., senior scientific analyst to the Home Office, stated that the *post-mortem* examination proved that the cause of death was heart-failure due to septic poisoning following upon two subcutaneous injections of pituitary extract prescribed by Dr. Tunnicliffe, Hariey Street, and administered by Dr. Emmerson, Eastbourne, who deposed that he had obtained it in ampoules from W. Martindale, New Cavendish Street, W. transpired that the solution was muddy. The evidence at the adjourned hearing this week started with Dr. W. d'Est Emery, bacteriologist, who stated that he had found living micro-organisms in the pituitary-extract injection, and attributed the septic poisoning to them. Dr. Willcox was recalled, and agreed with Dr. Emery, adding that the turbidity of the preparation would have aroused suspicion, as it is generally clear. After evidence by Dr. Tunnicliffe, in the course of which he said that the firm of Martindale is one of very high repute, Dr. W. H. Martindale deposed that this was the only occasion in his experience that a complaint had been received of septic poisoning arising from any of their injections. Mr. de Morgan, laboratory manager, stated that he prepared the injection on February 5 by the method that provided an injection which had not hitherto induced septic poisoning. The jury, after deliberating for fifteen minutes in private, found that death was caused by heartfailure due to septic poisoning. They also found that the injection was properly administered by Dr. Emmerson, and that death was due to misadventure. added a rider to the effect that they considered more care should have been taken in the preparation of the extract. The Coroner having expressed sympathy with Captain Woodman and the doctors, Mr. Muir, on behalf of Dr. Martindale, and Mr. Dickens for Dr. Emmerson, also expressed sympathy with Captain Woodman.

Poisoning Cases. Four deaths due to taking poisons have been reported during the week, three of them being suicidal cases. The poisons implicated were belladonna liniment, potassium cyanide, prussic acid, and spirit of salt. At the inquest in the spirit-of-salt case it was brought out in evidence that the poison was supplied by Mr. Fraser Jackson, trading as Huxtable & Co., 175 St. John Street, Clerkenwell. He and his son were witnesses. The poison had been bought by a child eleven years of age. Dr. Waldo was the Coroner, and in the course of the inquest he remarked

I am told that in Lancashire chemists sell more laudanum I am told that in Lancashire chemists sent more fautuaning than anything else, because it is given to babies to make them sleep. Why make a distinction between laudanum and spirit of salt? I am rather fearful about this new laudanum. Recently the General Medical Council, most wisely I think, increased the strength of laudanum and at the same time put it into Part I. of the Schedule. I apprehend trouble. I am afraid people might make up the strong instead of the weaker kind.

The jury returned a verdict of death by misadventure.

From Various Courts.

At Eckington Police Court on April 19, Mr. Walter W. Deakin, chemist and druggist, The Cross, Clowne, Chesterfield, was fined 6s. on a charge of keeping detonators in a place not registered for the purpose. Mr. Deakin was registered to keep explosives in a proper magazine.

At Gloucester City Quarter Sessions on April 16, the Grand Jury found "no true bill" in respect of Charles Coombs (40), chemist's porter, who was charged with attempting to commit suicide on April 3. Previous to the sessions Coombs had been certified insane. He was removed to the County Asylum.

At Leeds Police Court last week, the Stipendiary Magistrate fined a local tradesman 10l., with the alternative of eight weeks' imprisonment, for defying the police in regard to the Lighting Restriction Order under the Defence of the Realm Act. Defendant said he would pay in a week, but the Magistrate ruled that he must pay

that day or go to prison.

At the Guildhall Police Court, London, on April 15, George Wolff Simon, umbrella and walking-stick handle manufacturer, 38 Monkwell Street, was fined 101. for having on his premises, without a permit, contrary to the order of the Secretary of State, made under the Defence of the Realm Act, a quantity of celluloid ex-ceeding 112 lb.—viz., 180 lb. Defendant, who pleaded guilty, explained that he generally used about 100 lb. a day in his manufacturing operations, but owing to a machinery breakdown work had been delayed, with the result that the material had accumulated.

At Margate Quarter Sessions on April 12, Walter L. fraudulently obtaining a camera, value 91, 5s., from Mr. Victor J. Woolls, chemist and druggist, Cccil Square, Margate. Accused visited the pharmage and square, the camera, which was sent to his address at Herne Bay by a boy messenger, and was to be paid for on delivery, The messenger was met by accused, who took the camera, but did not pay for it. It was afterwards sold by his brother. The police stated that Baird had also obtained a camera, value 101. 3s. 6d., from Lander & Sons, chemists, Canterbury.

At Leigh Borough Court on April 15, Elizabeth Sheridan and Annie Clayton, wives of soldiers, were remanded on a charge at the instance of the National Society for the Prevention of Cruelty to Children, of neglecting the seven months' old daughter of Mrs. Sheridan. It was stated by the prosecution that the women gave the child, each morning and evening, half a teaspoonful of a preparation called "Infant's Friend," which was prepared by a Leigh chemist, one of the ingredients being opium, for the purpose of soothing it and inducing sleep, as they did not want to be troubled with it. At the inquest the jury found that the child died of insufficient feeding and the improper administration by the two women of the opium mixture.

Irish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

The death took place in Belfast a few days ago of Mr. R. J. Caldwell, D.Sc., who for the past three years had been in charge of the laboratory of Harland & Wolff, Ltd., Belfast.

Boileau & Boyd, Ltd., Dublin, were declared contractors for drugs and appliances at a discount of $20\frac{1}{2}$ and $23\frac{1}{2}$ per cent. respectively at the meeting of the Committee of Management of the Tyrone and Fermanagh Asylum.

The County Tyrone Asylum Committee has accepted the tender of Boileau & Boyd, Ltd., for the supply of medicines and medical and surgical appliances at discounts of 20½ per cent. and 23½ per cent. off prescribed prices, respectively.

Sir Wm. Baxter, D.L., Ph.C., Coleraine, was one of the two lay members of the deputation from the General Assembly of the Presbyterian Church in Ireland which waited on Lord Wimborne, the new Viceroy, on April 16, to present him with an address of welcome.

The official returns of the imports and exports at the port of Dublin for the year 1914, just issued, show that of sulphate of ammonia the imports rose from 1.436 tons in 1913 to 2,524 tons in 1914; the imports of drugs and chemicals rose from 1,826 tons to 2,029 tons in 1914; and those of fullers' earth from 13 to 49 tons.

At the meeting of the Bawnboy Board of Guardians last week, a letter was read from the Local Government Board stating that they are not prepared to sanction the acceptance of the tender of Fannin & Co., Dublin, for medical and surgical requisites, and would not allow a preference over Connor & Sons, who had sent in the It was decided to request the Local lowest tender. Government Board to sanction the acceptance of Fannin & Co.'s tender, as the medical officer recommended that firm, and the difference in price would be only about 1s. in the year.

The War and Drug-contracts.

The Local Government Board has issued a circular letter dealing with the fluctuation of prices since the war, and the question of contracts with public bodies as affected thereby. They request that in dealing with claims for extra payments by contractors owing to increased prices the public bodies concerned should aim at arriving at the exact loss which the contractor sustained through having to supply an article at a particular time, and they should endeavour to arrive at the correct figures by consulting all available sources of in-formation, including works' letter-books and other accessible documentary evidence. Should Boards of Guardians decide to make such payments to the contractors as they consider reasonable, care should be taken that this amount would not leave the contractor a profit on the portion of this contract supplied since the war. They impress the necessity of care and circumspection as all such payments would be the subject of review by the auditor. They would not be prepared to assent to any departure from the terms of any contract entered into after the outbreak of the war.

Boileau & Boyd, Ltd., Dublin, have written to the Naas Board of Guardians claiming 51. 7s., the extra cost of medicines supplied, over and above the contract price, which increased owing to the war. It was decided to adjourn the final consideration of this and other claims pending the furnishing of documentary evidence of the loss suffered.—The same contractors have also written to the Dunshaughlin Board of Guardians furnishing particulars of the claims for similar losses to March 31. The claim states that the contractor is only asking for additional charges from the commencement of the half-year (October), although prices advanced very much in the month of August. Only those articles have been increased which are enumerated in the Local Government Board's circular letter sent to each Clerk of Union on October 15, and since that date many other items have greatly increased in cost. The totals of increased prices set out for the supply of goods to the workhouse on October 15 and December 11 were respectivly 7s. 7d. and 13s. 10d.; to Dunboyne, December 11, 1s. 10d.; to Killeen, January 8, 1l. 7s. 10d.; and Dunboyne, February 18, 7s. 8d. Payment of the extra cost was sanctioned subject to the approval of the Local Government Board. The Athy and Rathdrum Guardians have also been considering similar claims.

Scottish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

Mr. A. Turner, Ph.C., Maxwelltown, Dumfries, has resigned the Provostship of the burgh on account of

A fire occurred in the premises of Mr. Arthur Pirnie, chemist and druggist, Mary Street, Laurieston, Falkirk, on April 17, and damage was done to the extent of fully $1,500\tilde{l}$.

For stealing from the shop of Mr. Robert Hood Henderson, chemist and druggist, East End, Chirnside, a bottle containing 25 oz. of laudanum, Catherine Young was on April 16 ordered by Sheriff Macaulay to pay a fine of 10s., with the alternative of ten days' imprisonment. The Glasgow Pharmacy Golf Club held its spring competition over Williamwood Course on Tuesday, April 20. The weather was excellent, and there was a large turnout of members. The finalist in the monthly medal competitions was Mr. William Thomson, with a net score of eighty-three. Mr. R. Jack was second with eighty-six.

Aberdeen and the North.

Mr. J. Fewtrell, chemist and druggist, Turriff, has been appointed chemist to the Turriff Parish Council for the ensuing twelve months.

An application by Mr. G. P. Gibson, chemist and druggist, 12 West Church Street, Buckie, for a wineliceuce has been refused. It was urged, against the application, that, if granted, it would create an undesirable precedent, because all the other chemists in the town would apply for licences, and, further, in case of "total prohibition" compensation would have to be paid to the holder by the ratepayers if the licence was granted.

The report and balance-sheet of the directors of the Northern Co-operative Co., Ltd., Aberdeen, for the halfyear ended February 28, 1915, indicates that the net profit in the drug-department during the period under review was 692l. 9s. 1½d., compared with 486l. 10s. 2d. in the corresponding period of 1913-14. The "cash drawings" of the different branches during the six months ended February 28, 1915, and the corresponding period of 1913-14, were:

Half-year ended Feb. 28, 1915. Feb. 28, 1914.

Feb. 28, 1915. \pounds s. d. ... 1,110 19 $6\frac{1}{2}$ t... 699 17 3 eet 759 11 $5\frac{1}{2}$... 704 3 $1\frac{1}{2}$ d... 466 2 9At 33 Rosemount Viaduct ..., Branch No. 1, 577 George Street...
, No. 2, 127 Holborn Street
, No. 3, 198 King Street ...
, No. 4, 69 Victoria Road...

Totals 3,740 14 11 3,253 4 1

To these totals must be added the amounts due for, medicines supplied under the National Insurance Act (65l, 17s, in 1914-15, and 95l, 13s, 0 $\frac{1}{2}d$, in 1913-14).

Dundee.

Dundee panel chemists have now received payment on account for medicines, etc., supplied to insured persons during February. The amount retained is one-third.

Water-glass for preserving eggs is a leading exhibit in chemists' windows, Easter soap-eggs being used in some cases to catch the eye. The Broughty Ferry "cut" price for water-glass is 3d. lb.; $4\frac{1}{2}d$. 2 lb.

A city pauel doctor has abandoned his usual custom of ordering "aq. dest." in his prescriptions, and now orders "aq. font."

It is rumoured that a well-known leading local pharmacist will shortly retire from the trade to devote himself to other interests.

Fife.

Mr. H. Nightingale, of Nightingale & Fergusson, chemists, Denbeath, has been re-elected Secretary of the local Bowling Association.

At the quarterly meeting of the Dunfermline Cooperative Society held last week, Mr. Alexander McLeod, who presided, said the drug-department in Crossgates showed marked improvement since last meeting, drugs having increased from 87l. last quarter to 119l. this quarter.

Many chemists in the "Kingdom" are now using the new papier-mâché boxes, British made, for ointments and pastes. That the new box is not a "substitute," but a "great improvement" on the "enemy-made" chip, is amply demonstrated by the complimentary references made about it at the counter.

The Local Authority of Fife have agreed to recommend the County Council to give a grant of 275l, to the Fife Analytical Association, and to increase the salary of the inspector (Mr. F. W. Christie) from 51. to 201. The membership of the Association is 430, and last year they analysed 185 samples.

French News.

(From the "C. & D." Paris Correspondent.)

To the Chemist's under Escort.—The "Bulletin of Refugees" from the Nord Department publishes some interesting notes on life at Roubaix, the important manufacturing city now occupied by the Germans for many months past. Among other details it states:

"It is forbidden to go out of doors after 8 P.M. In case It is increased to go out of doors after & P.M. In case of necessity (force majcure) if by chance one has to go to the doctor's or pharmacist's, one must carry a lantern, and before risking one's self in the street hail a soldier (this is done by loudly calling out 'Halt!'), who will conduct one to one's destination, and then safely bring one back to one's home'."

"La France," a Bordeaux daily, publishes a letter on British Army supplies. It states: "One figure will suffice to give an idea of the enormous quantity of stores daily forwarded from England to the Front. Five tons of vaseline are weekly used by soldiers to grease their feet after marches or long 'sentry.go' in the snow or icy-cold water." It also incidentally mentions that during the first months of the war some of the rum served out had been in store since the close of the Crimean war.



THE PHARMACY OF M. LABOUCHELY, AT USSEL, DEP. CORREZE. In front is the memorial to Marcel Treich-Laplène, the explorer, who was a native of Ussel.

"LECTURES POUR Tous," the French monthly magazine, published in its March number an article on "Alsatian Artists." This article contained the reproduction of an interesting painting by C. A. Pabst, of Colmar, representing Fleischauer's pharmacy as it existed in the days when the tricolour still flex over Alsace—i.e., before 1870 The quaint old windows, porcelain stove, drug-pots, etc., are all well represented, and give the picture a documentary value as an accurate and detailed representation of a local officine of half a century ago. while the pharmacist depicted gravely examining a child brought in by its grandmother seems to point out that counter-prescribing is not exactly a thing of vesterday.

M. MARIE P. E. WAGNER has been appointed to the post of Pharmacist-Inspector, the highest pharmaceutical grade in the French Army, equivalent to that of General

a native of the annexed provinces, having been born at Obernai (then in the French department of the Bas-1855. Taking his pharmaceutical diploma at Paris in 1878, he spent his early years in Tunis (Kairouan, Bizerte, Gabès, ctc.), coming back to Paris in 1887 as a second-class major. He was subsequently at Batna (Algeria), at Marseilles, and at Oran, where he became a first-class major. His later grades (Principal Pharmacist, second- and first-class) were taken at Paris, and, at the moment of his late promotion, he was acting as manager of the Central Sanitary Service Pharmacy at the Invalides, Paris. The recent transformation of this establishment, now a vast and up-to-date pharmaceutical factory, and its inspection by the Minister of War last year, were duly noted in our columns.

The French Pharmacist in War-time.

A Mobilised Man's Experience.

"Monsieur X—'s compliments, and he is at home on twenty-four hours' leave, if you care to call round at the pharmacy," was the message which arrived unexpectedly last Sunday. I promptly put on my hat, and strolled round to where my pharmacist friend X— has his officine, which he conducted personally and regularly until a certain fateful day last August. I had not seen him since, and in the trim military figure that stepped forward to greet me I hardly recognised my middle-aged, sombre-garbed, and sometimes worried and wearied acquaintance of eight months ago. He was evidently in the pink of health, and his rejuvenated face and figure were set off by the neatest and most up-to-date uniformthat slate-blue costume the French army is now adopting, with the cut of Norfolk jacket and indispensable puttees which are copied from our own troops-imitation is ever the sincerest flattery.

"When did I leave my business here?" said he, repeating my question. "Why, the second day of mobilisation. Yes, rather sharp work to leave all at forty-eight hours'

notice, but it was my luck.

'And you made the best of it?"

"I have little to grumble about. Having qualified before the war, I was mobilised as a second-class assistant pharmacist-major, and sent to Montargis, down Orleans way—a nice quiet little town, handy to run up to Paris when one gets twenty-four hours' leave; and I get it every now and then, though nothing more. I have had to take a locum to run my business, as you know.' And the work at Montargis?"

"Rather a holiday, after civilian pharmacy. As a rule, I am on duty each morning from 8 or 9 to 11 A.M. or so. Then we go and lunch, and look in again, say, at 2 P.M., and possibly stay till 5. You see, the surgeons operate in the afternoon, as a rule, and we supply them with disinfecting-lotions and so on. We compound medicines, of course, as required; we do a good deal of analysingdrinking-water especially, but also urine, sputum, and pathological substances generally; and we disinfect premises, etc., especially those vacated by contagious cases.

"The hospital is a small one?

"There are about a hundred and fifty beds at my place—Temporary Hospital No. 22; you will know it as what was formerly the Boys' College. There are three or four other hospitals in Montargis, but I only dispense for this one. I have two young fellows under me, both unqualified so far, but ex-pharmacy assistants and students. There is an administrative officer to look after accounts, etc., and three surgeons. No, not young fellows all men of forty or so. Montargis is what we call a 'distributing centre.' Hospital trains are sent there direct from the Front—Dixmude, Perthes, no matter where. Each train contains 1,000 wounded as a rule. The surgeous go down and meet the train, and 'sort' the cases, re-forwarding 100 to Gien, for instance, 100 each to several other places, and keeping the worst cases-i.e., those that are hardly fit to travel further-for ourselves at Montargis.

"So you have serious cases?"

"Nearly all bad wounds. A few sick, of course, some typhoid, some tetanus, and—worst of all, for nearly of Brigade, in succession to M. Roeser, retired. He is always incurable—some gaseous gangrene. Yes, I think

so far our army has been wonderfully free from epidemies. Of course they may break out when summer heat comes on, but by that time the Army may be out of the trenches.'

"You are a Territorial, I think?"
"I was a Territorial, but during war-time such distinctions practically disappear. I may say, however, that all pharmacists belonging to the 'active' or first-line army are actually at the Front. I myself, being 'medically fit,' have volunteered for the Front, and may be sent there now any day. That's why I had this new slate-blue uniform made. I went away, of course, in the old-fashioned red trousers and dark tunic; my kepi is the only thing I haven't changed."

I glanced at the red cap and his coat-sleeves, and remarked, "Hasn't it changed? You went away, you remarked, Hash to changed: Too well away, you told me, with a sub-lieutenant's single gold stripe, and now I see the two 'galons' of a full lieutenant—'first-class assistant pharmacist-major' is, I believe, the correct

He laughed again. "Yes, they promoted the lot of us—vou heard about that. Well, for my own part, though I say it as shouldn't, I think I've honestly earned my extra stripe. I have figured in the Army List for ten years as a second-class aide-major; for it was all that time ago when I managed to put in ten days at the St. Martin's Military Hospital here in Paris, pass my exam., and get my first 'galon.' Add to this the seven months during which I have given myself entirely to army work as a mobilised man. And I may go to the Front as soon as some older or more fatigued man wants a holiday. They're arranging it all very fairly now, you know: the young fellows go first, then the older men, the bachelors before the married men, and so on.

"Is it true officers at the Front get double pay?" "Not double, but extra pay. It is only fair, of course. By the way, I was at one time in the 'war zone,' "They shifted you from Montargis?"

"No, I stayed where I was. It was the Germans that shifted themselves south-east of Paris, at the end of last August; don't you remember? Ah, it's all aucient history now, thank goodness. There was a good deal of excitement at the time, and we had a busy moment while the fighting was going on near the Marne, a trainload of a thousand wounded arriving every four hours, No, we had no English, but plenty of Moroccans. Uneivilised and awkward patients? No, we didn't find them so. I remember one of them being 'ragged' by a wounded Frenchman. The Moroccan, losing patience, at last turned on his tormentor, and said, 'Toi sauvage!' and the laugh that followed secured him from further amovance." annovance.

Noon was now approaching: it was not only my friend's lunch-hour, but also the time at which his pharmacy closes on Sunday. So I took my leave with a final

question:

"You are lodged at the hospital?"

"Not at all. French officers always live outside barracks, and lodge in the town, don't they? Well, I do the same. You must try and run down some time, and you will see there are worse things in the world than being mobilised.

Considering that this man of forty-two left a firstelass prosperous business at a day or two's notice, his final speech and general bearing left me musing over an old problem. Whether it is inbred patriotism or national Mark Tapleyism, the attitude of the Frenchman towards his military duties is often a marvel to some and a lesson

BAYER'S DIVIDEND for 1914 is 19 per cent. (28 per cent. in 1913), and that of the Badische Anilin- und Soda-Fabrik

1913), and that of the Badische Anilin- und Soda-Fabrik 15 per cent., against 28 per cent.

INSTITUTE OF CHEMISTRY.—Part 2 of the "Proceedings" for 1915 has been issued. It contains a report of the annual meeting held on March 1, the address of the retiring President (Professor Raphael Meldola), the proceedings of the Council during March and February, including the report of the Glass Research Committee, and a list of members and students serving with the Colours. The volume is issued under the supervision of the Proceedings Committee.

South African News.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is supplied weekly to members of all the Chemists' Societies in South Africa.

Orange Free State.

Mr. W. Lehman, chemist and druggist, Vrede (formerly with Messrs. B. O. Jones, Ltd., Boksburg), has been elected a town councillor. Vrede is one of the centres of the recent rebellion, and the town where De Wet made his famous speech at the beginning of the rising.

FIRE .- A slight fire occurred in the basement of Loewenstein, Adams & Co., wholesale chemists and druggists, Market Street, Johannesburg, on March 21, when damage estimated at less than 1,0007, was done. The basement was stocked with all kinds of chemicals, including a large

quantity of potassium cyanide,
Another Hannah Case.—At Amersfoort, before Mr. Thomas Jooste, Assistant Resident Magistrate, on March 27, Thomas Hannah, a much-respected resident, says the "Transvaal Leader" correspondent, who has been practising in this town for the last six years, and who has practically lived in the Courts most of that time (through the registration trouble), was charged for the fourth time with the alleged. Contravention of Section 39 of the Medical, Dental, and Pharmacy Ordinance, 1904, in that, between October 23, 1914, and January 15, 1915, he did "wilfully, unlawfully, wrongfully, and falsely take or use the name or title of an apothecary, chemist and druggist, not being registered as such in the Transvaal. The case, which was previously heard on January 28 last, was remitted by the Attorney-General. At the outset Mr. Hannah, who conducted his own case, asked to lodge certain objections, and reasons for them, against appearance in this the fourth prosecution in the case. Before he had read far the Magistrate objected to the strong animadversions upon the Judiciary, remarking that he considered accused liable to arrest for contempt of Court; but the accused emphatically denied that he intended his complaints against the present Court, and the Magistrate made a noteto that effect. Mr. Hannah then proceeded, stating that a complaint he made against a medical man wrongfully assuming the description doctor of medicine had not been taken up by the authorities. He recalled the history of the actions against him, referring to his appeal to the Judicial Committee of the Privy Council, and complained that the present indictment disclosed no offence. The Magistrate asked the Public Prosecutor to read

out the indictment, which was done, and the Magistrate agreed with the accused. The Public Prosecutor stated that the accused was charged with practising as a chemist and druggist, but the Magistrate replied that that was not a crime. The Public Prosecutor having read the Section of the Act, the charge was amended so that. accused was only indicted on the point of registration, having insisted on a clear charge being made, that he might know what he really stood charged with. Accused said that the Court had before it the fact that he was duly registered in Natal as a duly qualified chemist and druggist, and this was within the Union of South Africa. He therefore failed to see how he could be charged with acting falsely, contending that the assumption of his rightful proper names or titles constitutes no offence, and that fraud or fraudulent intention is the necessary ingredient, and constitutes the essence of the offenceunder the section, the offence under the section being, in fact, fraudulent practice in every shape or form. The Public Prosecutor asked to have the indictment amended so as to include the words "whereas the accused is not registered in the Transvaal as a chemist and druggist as by law provided." The Magistrate said that the chargecould be entirely withdrawn as it stood, but after argument from both sides, it was decided to go on with the case in the amended form, and, after evidence, in an eloquent speech the Magistrate gave judgment for the

Crown, saying:

The case was an extremely painful one, and he deeply sympathised with the accused. He had not tried the pre-

wious case, and only knew of it from the law-books. He had read the case of Rex v. Hannah (C. & D., 1914, I., 825, II., 16), and in that way he got some insight into the matter. He took it that it was perfectly possible that accused was within his rights in acting as a chemist and druggist in Natal, and yet could he objected to in the Transvaal if he was not registered there. That was a matter which Parliament alone could put right. It seemed to him that the points raised were similar to those in the To him that the points raised were similar to those in the case of Rex r. Hannah, which he had before him. In the case of Rex r. Hannah, which he had before him. In the present case it was not alleged that the accused acted as a medical practitioner, the indictment merely stating that he was not registered in the Transvaal. He (the Magistrate) was satisfied regarding registration in Natal, but the Act that he had to deal with was that of 1904 of the Transvaal. that he had to deal with was that of 1904 of the Transvaal. To take away all the redundant words from the section, so far as it applied to the accused, it simply meant that he was not registered under the Ordinance. According to Mr. Hannah's own admission, this was so. The fault did not lie with that Court or any other Court: it was the fault of Parliament. Parliament was put there by the people to put things right. Until Parliament put this right the Courts, however much their sympathy might go out towards sufferers, could not object to carry out the letter as well as the spirit of the law. The two issues of the "Volkstem," in which there were two hig advertisements, were may me many the court of the law. in which there were two big advertisements, were mainly responsible for the present case. Mr. Hannah did not deny that he was responsible for these advertisements, nor, on the other hand, was it for a moment doubted by the Court that he was a duly qualified chemist and druggist. He was, however, not registered in the Transvaal. People therefore to some extent were deceived under this Ordinance, and in view of the Supreme Court's judgment he could not do other than find the accused guilty. He extended to him his deepest sympathy in this very trying

Mr. Hannah, before the Magistrate passed sentence, asked that the sentence should be made as light as possible in view of the fact that he was fighting for a great principle, as also for a clear statement from the Courts regarding the principles governing medical, dental, and pharmacy practice in South Africa.

The Magistrate imposed a penalty of 201, or in the alternative one month's imprisonment, with suspended sentence, in order to afford an opportunity of appeal.

Cape Province Pharmaceutical Society.

The annual general meeting of the Pharmaceutical Society of Cape Province was held on February 11. Mr. G. R. Cleghorn (President) was Chairman, and was supported by Mr. J. Sowden and Mr. J. Dell (Vice-Presidents) and the following members: Messrs. C. G. E. Edmeades, D. K. Petersen, W. Froembling, E. B. Jardine, J. Mohr, W. Aitken, J. Austin Thomas, H. Ferguson, and J. Sloan (Hop. Socretary) (Hon. Secretary)

W. Alker, J. Austra Thomas, 11. Ferguson, and J. Stoan (Hon. Secretary).

Financial Statement.—The Secretary presented his report of the year's working. Among other items, he gave the interesting information that the Society now has a membership of 100. The Treasurer's report showed that the Finance Committee had decided to place a further sum of 751. on deposit, bringing their total credit with interest to date to 1091. 15s. 6d., which leaves a balance in hand of 18t. 9s. 10d. President's Address.—The President, in his remarks, touched upon several points of interest concerning the year's work, including the new B.P. and some of the more important alterations therein. He recommended the members to read earefully the "very excellent series of articles which appeared in The Chemist and Druggist weekly from October 3, 1914, to December 19, 1914, and an article in the Diary for 1915." No definite time could yet be given as to the date on which the B.P. 1914 would become official in the Province. The President then touched upon the question of "shorter hours for chemists," and heartily thanked the members of the Committee for the enthusiasm shown, by which the result of their labour was embodied in shown, by which the result of their labour was embodied in the proposed Shop-hours Ordinance without any alteration. Dr. Freembling then reported upon the School. The Chemists' Trade Defence and Vigilance Fund and the Secre-

Chemists' Trade Defence and Vigilance Fund and the Secretary's report of the Benevolent Fund were also dealt with. Council and Officers.—The new Council was then declared as follows: President, Mr. J. Sloan: Vice-Presidents, Mr. G. R. Cloghorn and Mr. J. Dell: Hon. Secretary, Mr. W. Aitken; Hon. Treasurer, Mr. C. G. E. Edmeades; Benevolent Fund Committee, the President, the Secretary, Messrs. Dell and Edmeades; Council, Messrs. Aitken, Edmeades, Hill, Sloan, Cleghorn, Froembling, Petrie, Sowden, Dell, Hopkins, Petersen, and J. Austin Thomas.

Thomas.

Westminster Wisdom.

By the "C. & D." Parliamentary Representative.

EXPORT OF LINSEED OIL.

The President of the Board of Trade is to be asked by Mr. Hogge in the House of Commons on Wednesday next whether there has been any large increase in the exportation of linseed-oil to Holland from this country since the war broke out, and, if so, how much.

INOCULATION.

Mr. H. J. Tennant, M.P., informed Mr. Yeo in the House of Commons on Tuesday that there are no grounds for the suggestion that Second-Lieut. Beate, of the Connaught Rangers, died through septic poisoning caused by inoculation against typhoid. He had not been inoculated since his arrival in the command. He is reported to have died of septicæmia due to absorption from an abscess of the heel, and he received as treatment during his illness injections of antistreptococcus serum properly given.

SCOTTISH PRESCRIPTION-CHECKING BUREAU.

Our Parliamentary correspondent learns that at a private meeting of the Scottish unofficial members of Parliament, held at the House of Commons on Tuesday evening, Mr. Eugene Wason presiding, an informal discussion took place on the new regulations issued by the Scottish Insurance Commissioners in reference to the Central Prescription-checking Bureau. The opinion held was that the regulations ought to go through, but it is probable that the matter will be further considered at a meeting of the Committee to be held next week.

PHYSIOLOGICAL STANDARDISATION.

Mr. Yeo asked the Home Secretary on April 20 whether, in view of the fact that the use of animals in standardising drugs in the Wellcome laboratory involves unnecessary cruelty, he will consider the advisability of withdrawing the licences granted to vivisectors in that establishment.-Mr. McKenna replied that the work of standardising drugs at this laboratory is of the greatest importance for the prevention and treatment of disease. It is carried on in accordance with the prescribed conditions, and is subject to the supervision of inspectors under the Cruelty to Animals Act. He is advised that no cruelty occurs in the work, and that every precaution is taken to prevent it.

SPIRIT-DUTY ON TINCTURES.

Mr. W. C. Bridgeman, M.P., is again raising the question of the spirit-duty on tinctures used in hosof the Exchequer whether he has reconsidered the question of giving an exemption from duty to hospitals using a large quantity for tinctures in surgical work; and if there is any reason why any such exemption cannot be given to hospitals without also giving it to doctors and chemists.-Mr. Lloyd George replied that he is considering the suggestion.

Mr. Bridgeman, who has previously brought the question forward in Parliament, informed our Parliamentary representative that in the case of the London Hospital alone the duty amounted to about 200*l*. while the charge to the whole of the London hospitals probably represented 20,000l.

THE KELP-INDUSTRY IN SCOTLAND.

Mr. Hogge asked Mr. McKinnon Wood, M.P., in the House of Commons on Monday, what the Board of Agriculture are proposing to do as the result of their recent inquiry into the kelp-industry in Scotland .- The Secretary for Scotland replied that the Board have communicated with a number of authorities and proprietors in the Inner and Outer Hebrides and Shetland with a view to inducing them to organise the industry, and the Scottish Agricultural Organisation Society has undertaken similar work in Caithness. The Board are arranging to send instructors to a number of districts in these areas where kelp-making is to be undertaken, and they are distributing a practical leaflet on the subject, of which he is sending a copy to his hon, friend.

Legal Reports.

Trade Law.

A Judgment Summons against Oswald Malcolm Ellis, chemist and druggist, 32 Manchester Road, Haslingden, was heard by Judge Sturges in the Blackburn County Court on April 20, the amount involved being 2l., part of a balance of 9l. 10s. still owing. The case was adjourned for two months.

Alleged street Obstruction.—At Old Street Police Court, London, on April 20, a summons against Mr. Edward A. Marr, manager to Johnson & Son, Ltd., assayers, refiners, and wholesale druggists, 23 Cross Street, Finsbury, for wilfully obstructing the footway by allowing a truck and barrel to stand thereon from 1.15 p.m. to to 2.15 p.m. on April 9 was dismissed. The Stipendiary Magistrate (Mr. Clarke Hall) said the public have an easement over the cellar-flaps, and the truck obstructed that right in this case. The street was a public one, kept in repair by the ratepayers' money, and Messrs. Johnson's claim to a right of entry by the cellar-flap (upon which terms they had taken the premises) raised a very important point in the public interest, but he did not think there was any wilful obstruction.

Effects of War.—In the Shoreditch County Court on April 16, before Judge Smyly, K.C., the Jelloid Co., 205 City Road, N., sued Thos. W. Fox. 58 Marsh Lane, Bootle, Liverpool, to recover a judgment debt of 11. and costs. His Honour said the defendant had written saying, "I admit the balance of the above debt, 11., and expenses, but I regret to say I am unable to pay the full amount as I have several judgments against me, which I am now paying into other courts. My business is only small, which is at the present almost at a standstill. The advanced prices of my goods and the high price of living makes it impossible for me to offer more than 2s. a month." Judge Smyly: I darcsay his statement as to the advance in prices is correct, as all chemicals appear to have gone up, and I suppose chemists' goods have gone up as well. His Honour made an order for defendant to pay 10s. a month, with a ten-days' committal in default.

Substitute-service Application.—In the Irish King's Bench Division on April 19, before Mr. Justice Moloney, Mr. Macafee applied for liberty to substitute service of the writ of summons in an action brought by Baxter, Ltd., chemists, Ballymoney, to recover 1281. 17s. 10d., the price of goods sold and delivered to Thos. Gilmore, Ballycastle, co. Antrim. Counsel relied on an affidavit of Mr. William Beattie, secretary and director of the plaintiff company, who stated that the defendant had last month closed his shop and is believed to have gone to Scotland. It was also believed that his wife is still living in the house in Ballycastle, and deponent states that he is unable to effect the service of the writ on her. He had received an intimation from an auctioneer that he had received an intimation from the defendant to dispose of his property by auction. Mr. Justice Moloney said the plaintiffs did not appear to have secured the services of a process-server, who would be likely to effect service better than Mr. Beattic. He would allow the motion to stand, and in the meantime would advise the plaintiffs to keep their eyes on the auction.

Carriage of Cotton-wool.—At the Nisi Prius Court of the Liverpool Assizes on April 16, before Mr. Justice Sankey and a special jury, Evans Sons Lescher & Webb, Ltd., Hanover Street, Liverpool, sued A. Coker & Co., Liverpool, for the recovery of 268l. 8s. 10d., moncy alleged to have been overpaid in connection with the carriage of a consignment of cotton-wool from Liverpool to Archangel. Defendants' contention was that plaintiffs agreed to pay the rate of freight charged. The plaintiffs' case was that they instructed defendants to reserve space for cotton-wool for the Russian troops, to be conveyed by s.s. Noroka, the amount not to exceed 100 tons. Towards the end of November, after the goods had been conveyed, plaintiffs were told the freight would be 5l. per measured ton. They replied that it ought not to have been more than 40s. per ton at the outside. In order to get the bill of lading and perform their contract with the purchaser of the cotton-wool, plaintiffs, under protest, paid the rate of 5l. demanded, and now sought to get back the difference. For the defendants it was contended that the rate was not unreasonable since the Soroka was the last vessel going out to Archangel that season, and she was going out at a time of the year which made it inevitable that she would have to winter in Archangel owing to the ice. The jury gave a verdict for the defendants.

Spurious Zinc Ointment.—At the Bradford City Police Court on April 20, Shaw Tingle, drug-store proprietor, 170 Westgate, Bradford, was summoned, under Section 6 of the Sale of Food and Drugs Act, 1875, for selling zinc ointment, which the city analyst (Mr. F. W. Richardson) certified to consist of 10 per cent. hydrated lead carbonate and 90 per cent. of lard. Defendant pleaded guilty, and Mr. T. K. Greenwood, explaining matters for him, said he was a chemist of forty years' experience. [The name is not on the Register of Chemists and Druggists.—Editor.] Hefrankly admitted that on this occasion he was asked by a small boy for twopennyworth of zinc ointment, and that, having none in stock at the moment, he had foolishly supplied the ointment, which he had used for many years, and which, he held, was not only not dangerous, but wasfar superior to the zinc ointment of the Pharmacopeia. The Stipendiary Magistrate: As a chemist, he ought toknow, but, though my chemical knowledge is not extensive, I know enough to know that white-lead is a very deleterious substance to get into the system. After further remarks, a fine of 51. was imposed, and 12s. 6d. witneseests, with the alternative of a month's imprisonment.

Stopped Post-dated Cheques.—At Lambeth County. Court, before Judge Parry, on April 16, the London County and Westminster Bank, Ltd., sought to recover 29t, from Henry Colverson, 346 Brixton Road, S.W., paid to himmer at the bank, bought a business from defendant, giving him a post-dated cheque for 29t, the balance of the purchasemoney. Some time before it was due for presentation, on January 1, 1915, West stopped payment of the cheque at his bank, but he did not notify defendant, who passed the cheque through his own bank, and they presented it toplaintiffs, whose cashier, forgetting it had been stopped, paid it to defendant's bank, who credited him in his account with the amount of the cheque. Five days afterwards plaintiffs found out their mistake, and claimed from defendant the return of the amount as money paid to him under a mistake of fact. It was claimed for plaintiffs that they were entitled to get the money back, as notice was given to defendant within reasonable time of the error. Judge Parry gave judgment for defendant. The so-called mistake of fact was really negligence or stupidity, with which the defendant had nothing to do. The case was similar to Skyring v-Greenwood & Cox, decided by Mr. Justice Bayley. His-Honour considered the present case of importance to customers of banks, and allowed defendant costs on the "C" scale.

Trading with the Enemy.—In the City of London Court on April 19, Judge Atherley-Jones, K.C., gave hisdecision in the case of Bruno Ullman (successor to Bechmann & Ullmann, 21 Moor Lane, E.C.), who sued Mr. S. Nyman, 80 Westbourne Grove, Bayswater, for 111. 5s. for goods. The defence was that the plaintiff could not recover because of the Trading with the Enemy Act, although the defendant was quite prepared to pay if so ordered. Plaintiff, it seemed, was a German by birth, and wasnaturalised in 1899. In 1901, he said, he went into partnership with Bechmann, a German. Bechmann died, and the business (a branch of one in Erfurt, Germany) passed to Ullmann. The goods sued for were ordered and delivered in March 1914. Plaintiff ranked as a British subject, and was entitled to all the assets of the concernincluding the debt due from the defendant. Plaintiff had communicated with the Board of Trade, the Treasury, and the Comptroller of Companies, and they had no objection to him recovering. The business in London was a distinctentity from the Erfurt one, but the goods supplied to the defendant were invoiced from London and Germany. Defendant said he had already got into trouble with the authorities for paying in another case. Judge Atherley-Jones, K.C., said that as the point raised was a novel one and had never been before any Court, and as it was of great importance to every trader in this country, he had taken time to consider his decision. He had come to the conclusion that plaintiff could not recover, as he was satisfied that the business of Ullmann & Bechmann was a German house. As for the correspondence with the Board of Trade, etc., it was immaterial, as Courts of law did not found their judgments on the opinions of Government officials. Plaintiff's business in London was only an agency-Judgment for the defendant, with costs, but he gave leave to the plaintiff to appeal, as he thought it quite likely that the Divisional Coort might take another view. [The decision seems to us at variance with Mr. Justice Lush's

High Court Cases.

Unless when otherwise stated these cases have been heard in the High Court of Justice, London,

NOT ALIEN ENEMIES.

In the King's Bench Division on Monday, April 19, Mr. Justice Darling allowed the record to be withdrawn in an action brought by Mr. Albert Paul Engster, Highgate, Mr. Oscar Louis Engster, Harpenden, and the British Syphon Manufacturing Co., Ltd., Basinghall Street, E.C., against Messrs. Thomas Mayo & Co., Ltd., Church Street, Minories, E.C.

Sir Edward Carson, K.C., M.P. (for the plaintiffs) said the action was brought not to recover damages, but to make plain the position of the plaintiffs. The complaint was that a traveller in the employ of the defendant company had stated to one of the plaintiffs' customers that Messrs. Engster, the managing directors of the British Syphon Manufacturing Co., were Germans. It was quite untrue. Their father was a Swiss, but they had lived here practically all their lives. One of them is now serving with his Majesty's Forces in Turkey, and his brother is a Freeman in a City Livery Company in London. In such circumstances it was very unpleasant to be called Germans, and it caused them considerable anxiety. All the shares in the plaintiff company were held by British subjects, and all the employes were British. The defendants had not persisted in the statement, and had expressed their regret that it was ever made. Messrs. Engster had brought their action merely to have it established that they are not alien enemies, and, that having been done, the record in the case would be withdrawn.

Mr. Gordon Hewart, K.C., M.P. (for the defendants). said they would indemnify the plaintiffs against the costs incurred by these proceedings. They had always known that there was not the slightest foundation for saying that anyone connected with the plaintiff company was a 'German and it was a matter of great regret that any such thing should ever have been said. Both parties were syphon-manufacturers.

Alleged Inaccurate Dispensing.

At the Lambeth County Court, before Judge Parry and a jury, on April 16, John Henry Holt, labourer, 31 Stock-dale Road, Battersea, brought an action for damages against Frederick Ellis, chemist and druggist, trading as Gadd & Son at 357 Wandsworth Road, Battersea, for wrongful dispensing of an Insurance Act prescription. Mr. Duckworth, barrister, appeared for the plaintiff, and Mr. C. B. Marriott, barrister, for defendant.

Plaintiff's evidence was to the effect that on March 25, 1914, he woke up with a swollen face, and was unable to shut his left eye and could not close his teeth. He went to his panel doctor, Dr. Rhodes, that evening, who gave him a prescription for a mixture and an iodine application, which were made up by the defendant. He continued to take the prescriptions to the same shop throughout April, and was progressing favourably. On May 9 he got a further prescription from the doctor, which he took to the defendant's shop. He was to have a bottle of belladonna paint, which he had had before, and he took the bottle previously supplied him by the defendant. He was told to call later for it, and his daughter fetched the medicine in the evening, bringing it home in a leather spring-bag. He took the packets out, and found the chemist had sent boracic powder instead of boracic ointment, and it was sent back and changed. He applied the paint to his face the same night. On the Sunday morning he felt a tingling sensation in his face, but he applied the paint twice again that day, using a brush supplied by the chemist. He also applied it twice on the Monday, but on the Tuesday morning he found his face blistered where he had applied the paint, and went at once to see Dr. Rhodes, who told him to go back and fetch the bottle of paint. The doctor sent him with the bottle and a note to the chemist's, where he gave them to the dispenser, who smelt the bottle and said he could see nothing wrong with it. He took a quantity of the paint out, which

he said he would send to be analysed. His doctor sent him to another chemist to have his prescriptions made up. The blisters were very painful and burnt, and in a few days an eruption began and spread over his body, which he had until the end of July.

Judge Parry pointed out that there was nothing in the pleadings referring to wrong medicine being supplied,

Mr. Duckworth agreed, and said he would not press the question of the medicine as it was not analysed.

Plaintiff, continuing, said on August 23 he was ealled up with the Reserves, and on October 18 he had to go into hospital, being discharged on January 13 as suffering from paralysis of the left eye. In cross-examination, plaintiff said he had used the belladonna paint between April 28 and May 9, with improving results. He made a complaint to the Insurance Committee for London on May 25 that the chemist had sent him the wrong stuff in a bottle, and he attended before the Pharmaceutical Sub-Committee on July 10, seven gentlemon being present, one of whom tried it on his arm.

Mrs. Lucy Holt, wife of the plaintiff, gave corrobora-

tive evidence.

Dr. J. J. Rhodes, 65 Battersea Park Road, S.W., said plaintiff attended at his surgery for facial paralysis. He corroborated plaintiff's statements as to the prescriptions given, that of May 9 including collodium belladonnæ, which he had used before, also a mixture, boracic ointment, and wool. There were no tabloids or lin. terebinth. When plaintiff came to his surgery three days later, with his face blistered and inflamed, ho noticed there was a strong smell of kerosene when he lifted the wool away from the face. Plaintiff fetched from his house the bottle from which he had taken the paint, and witness found that it smelt strongly of kerosene. He wrote a note to the chemist to the effect that it was not what he had prescribed. The dispenser, Mr. Smith, wrote in reply:

"I am very sorry that there appears to be something wrong with the coll. belladonnæ, and I cannot understand how it came about, as I got it specially for your prescription. I cannot quite comprehend what there is wrong with it, but I hope it has not caused your patient any serious pain or inconvenience. I will inquire into the matter at once.

Later Mr. Smith, the dispenser, called on him. Witness had no doubt in his mind that the application sent was kerosene, which, applied twice a day and the face wrapped in wool, would have the effect stated by the man.

Charles Gilbert, Clerk to the London Insurance Committee, produced a letter written by the defendant to the Committee, in which he said that the only reason he could give for the state of plaintiff's face was that some kerosene must have been attached to the sides of the bottle in which the belladonna was dispensed.

For the defence, Mr. Frederick Ellis said that Mr. Edgar Smith and Miss Metcalf were his dispensers at the shop in Wandsworth Road. The first he heard of the mistake was about a fortnight after it occurred, and he had made inquiries, but could not account for it.

Mr. Edgar Smith, chemist and druggist, said his father is a chemist, and he had had fifteen years' experience in France, Italy, and London. When plaintiff came on May 9 he did not think he brought the old bottle, for it was double the quantity ordered to what he had on previous occasions. The coll. belladonnæ was taken from the ordinary bottle. Witness had previously used it for Dr. Rhodes's prescriptions without complaint. He took the correct quantity as stated on the prescription, and made it up accordingly. The kerosene-bottle he was unable to produce; it was not kept near the coll. belladonne. When the bottle was returned to him he could not detect anything wrong. He examined the contents at the time, and tried it on the back of his hand, and it had no inflammatory effects.

Dr. R. S. Pearson, Clapham Road, S.W., said he saw plaintiff on May 24, when he was suffering from facial paralysis, and the skin was in a sensitive condition, but he did not think that was due to the use of kerosene, even if it had been used with wool. Witness's partner,

Dr. W. Fox, corroborated.

Mr. Marriott, in his address to the jury, pointed out

that the complaint was investigated by the Pharmaceutical Sub-Committee of the London Insurance Committee, and they were quite satisfied that it was not kerosene in the bottle, but coll. belladonnæ, and that it had no corroding or burning effects.

Judge Parry said that if the London Insurance Committee had not said something about it, they ought to do.

The jury awarded plaintiff 40t. damages, and judgment

was given for this amount, with costs.

Limited Companies.

New Companies Registered.

P.C. means Private Company and R.O. Registered Office.

Metto Paints and Compounds, Ltd. (P.C.),—Capital 1,5001., in 1/. shares. The first directors are P. S. Lewer, Cardiff, T. S. Priee, and G. Thomas.

Ward (Chemist), Ltd. (P.C.).—Capital 5001., in 11. shares. Objects: To earry on the business of ehemists, druggists, etc. The first directors are A. E. Ward, Mrs. E. Ward, and J. Gill. R.O., 39 Albion Street, Leeds.

RECENT CHEMICAL Co., Ltd. (P.C.).—Capital 1,5001., in 11. shares. Objects: To earry on the business of manufacturing chemists, manufacturers of chemical-products, etc. The first directors are J. Wilson, B. P. Sherrin, and J. Sharp, 26 Hillside Street, Edinburgh. Qualification, one share.

Lancashire Tallow and Fat Co., Ltd. (P.C.).—Capital 2,000%. in 1% shares. Objects: To take over and carry on the business at Hurst Park, near Prescot, Lanes, as the Lancashire Tallow and Fat Co. The first directors are J. Atherton, S. W. Atherton, B. C. Atherton, and A. Atherton.

Hayden Coffin T.P., Ltd. (P.C.).—Capital 10,0001., in 11. shares. Objects: To take over from C. Hayden Coffin and A. Neil the business-rights and property mentioned in an agreement between them and the company, and to earry on the business of wholesale and retail manufacturers and vendors of or agents for and dealers in all kinds of medicinal, dental, chemical, and toilet preparations, requisites and articles, chemists, druggists, etc. The first directors are C. Hayden Coffin (chairman), A. Neil, and R. Blackie. R.O., 65 London Wall, E.C.

Company News.

British Dyes, Ltd.—It is reported that this eempany has decided to exercise its option of acquiring the business of Read Holliday & Sons, Ltd. The necessary notices have been given, and the works will be taken over on May 3. Mr. Turner will continue to manage the business.

been given, and the works will be taken over on May 5. Mr. Turner will continue to manage the business.

ATKINS, BUSSELL & Co., LTD., 28 King Street, Regent Street, W., Chemical-manufacturers, etc.—Under a compulsory winding-up order made against this company the report of Mr. E. C. Bliss, Official Receiver, has been issued to the creditors and shareholders. The accounts filed under the liquidation show liabilities 249%. 15s. 10d., against assets 30l. 18s. 7d., and a deficiency of 2.378l. 2s. 3d. as regards contributories. The company was formed in April 1904 to acquire and carry on the business of paint, varnish, and chemical manufacturers and dealers, previously carried on at 28 King Street, Regent Street, W. The failure of the company is attributed by the directors to bad debts and want of working capital. The liquidation remains in the hands of the Official Receiver.

Bankruptcy Reports.

Re Harry Percy Jones. 25 Liverpool Road, Stoke-upon-Trent, Stafford, Chemist and Druggist.—The following are trade creditors herein: C. R. Harker, Stagg & Morgan, Ltd. (241.); S. Maw, Son & Sons (411.); Exors. of D. H. Oxen (3621.); Southall Bros. & Barelay, Ltd. (171.).

Oxen (3621.); Southall Bros. & Barelay, Ltd. (171.).

Re Malcolm Phillips. 170 Piccadilly, London, W., formerly Sponge-importer.—This bankrupt, formerly a member of John Phillips & Co., who in 1908 transferred their business to a limited company registered as John Phillips & Co., Ltd., applied on April 13, at the London Bankruptey Court, to Mr. Registrar Brougham for an order of discharge. Mr. J. B. Knight, Official Receiver, reported that the applicant, as one of the vendors of the business, received 8,2491. in shares and became a director of the

company at a salary of 1,000?. per annum. He lost eonsiderable sums by speculating on the Stock Exchange, with the result that he severed his position with the company in January 1914, and was made bankrupt in the following April, with liabilities 2,067?. and assets 5s. The discharge was suspended for three years.

Re George Nathan Spyer (trading as Cavendish & Co.), 288 Elgin Avenue, and late of 129 Shirland Road. Maida Vale, Manufacturer, Agent, and Importer.—An application for an order of discharge was made on April 20 to Mr. Registrar Hood at the London Bankruptey Court by this bankrupt, who failed in December 1910, with liabilities 3461. 8s. 6d. and no assets whatever. Mr. J. B. Knight. Official Receiver, reported that the bankrupt in December 1904 purchased a drug-store at Broad Street, Soho, which he earried on under management. It proved a complete failure, and in December 1905 the bankrupt assigned it to his manager in consideration of the latter taking over the liabilities. In May 1910 the bankrupt commenced business at 129 Shirland Road, under the style of Cavendish & Co., the business being for the sale of paste and powders for removing dirt and grease from hats and clothing. On December 11, 1910, he was arrested on an order obtained by a cash creditor for his committal for twenty-eight days for non-compliance with an order under a judgment summons, and in order to obtain his release he filed his petition. The only offenee reported by the Official Receiver was insufficiency of assets to equal 10s, in the pound on the amount of the unsecured liabilities. After hearing Mr. W. H. Spear on behalf of the bankrupt, his Honour granted a discharge, subject to a suspension of four months.

Gazette.

Partnerships Dissolved.

ERSKINE, A. M., and CASS, E. E., Goole, physicians and surgeons, under the style of Erskine & Cass.

Garron, E. G., and Higgins, A. G., 16 Albion Buildings, Aldersgate Street, E.C., manufacturers' agents and dealers in druggists' sundries and faney goods, under the style of Garrod, Higgins & Co.

Note.—The Alliance Drug and Chemical Co., 34 Leadenhall Street, London, E.C., are a firm not connected in any way with the Alliance Chemical Co., Ltd., which has been gazetted among joint-stock companies which are now liable to be struck off the register.

Private Arrangement.

The creditors of Thomas H. L. Adderley, registered druggist, 595 Crumlin Road, Belfast, were called together at Belfast on April 16, when a statement of affairs was presented showing liabilities amounting to 1907. 15s. 5d., and assets expected to produce 46f. 5s. 9d., after deducting the claims of the preferential creditors, the estate disclosing a deficiency of 144f. 7s. 8d. The debtor, being anxious to continue the business, agreed to pay a dividend of 5s. in the pound, at four, eight, and twelve months, the last two instalments to be secured to the satisfaction of one of the creditors present. The ereditors are: Samuel Gibson (11l.); T. McMullan & Co. (22l.); J. & J. Haslett, Ltd. (11l.); Elliott & Co., Ltd. (7l.); M. Marshall (5l.); Simpson & Mitchell, Ltd. (10l.); Lorimer, Marshall, Ltd. (7l.); Ayrton, Saunders & Co. (6l.); Heath Bros. (7l.); E. Rose & Co. (3l.); H. Sharo & Son, Ltd. (5l.); H. Mathews & Co., Ltd. (12l.); Provincial Incandescent Fittings Co., Ltd. Manchester (3l.); R. Poag (4l.); M. L. Dight (14l.); J. L. Wilkinson & Son (4l.); Belfast Steam Printing Co. (3l.); Stephen Smith & Co., Ltd. (5l.); Chemists' Sundries, Ltd. (3l.); Yardley & Co., Ltd. (3l.); Warwick Bros., Ltd. (4l.); the Pharmacists' Supply Association, Ltd. (10l.); Burns. Petric & Co., Ltd. (7l.).

New Source of Ngai Camphor.—An investigator of the Bureau of Forestry of the Philippine Islands has discovered that a local plant hitherto regarded as a weed is identical with Blumea balsamifera, from which the Chinese in Hainan have long manufactured ngai eamphor. While plentiful in the islands, the plant does not seem to be so distributed as to make the establishment of a factory practicable, as a sufficient supply of raw material could not be obtained within a reasonable radius, unless artificial cultivation is resorted to.

Births.

Authenticated notices are inserted without charge.

Carleton.—At the Medical Hall, Dunluce Street, Larne, on April 15, the wife of G. H. Carleton, Ph.C., of a son.

GITTINS.—At Buckingham, on March 30, the wife of Samuel E. Gittins, chemist and druggist, of a daughter.

HETHERINGTON.—At 154 Quartz Street, Hillbrow, Johannesburg, Transvaal, on March 24, the wife of H. M. Hetherington, chemist and druggist, of a son.

Marriages.

Authenticated notices are inserted without charge.

BOWER—NEALE.—At Chippenham Parish Church, on April 14, the Rev. W. G. Bower to Norah Marianne, second daughter of Mr. Edgar Neale, chemist and drug-

gist, Chippenham.

STOREY—BARTLETT.—At St. Margaret's, Streatham Hill, by the Rev. L. P. Smith, M.A., on April 17, William Armstrong Storey, B.Sc., A.I.C., Ph.C., of Wick, near Bristol, only son of Edward H. Storey, Ph.C., 20 Killie ser Avenue, Streatham Hill, and 42 Castle Street, Oxford Street, W., to Dorothy Jessie Bartlett, A.I.C., Ph.C., only daughter of the late W. H. Bartlett and Mrs. Bartlett, 16 Mount Nod Road, Streatham.

SWINBURN-MANGNALL .-- At St. Chad's Church, Withington, by the Rev. E. B. Ward, on April 15, Banks Swinburn, chemist and druggist, Penrith, son of Mr. John Swinburn, Gowbarrow Hall, Ullswater, to Annie daughter of the late Mr. Alfred Mangnall, Withington,

Manchester.

Webb-Gilmore.—At the residence of the bride's mother, Larne, on April 7, by the Rev. J. L. Donaghy, assisted by the Rev. J. E. Doherty, George A. Webb, Ph.C., elder son of the late Dr. Webb, Cork, to Nellie, second daughter of the late Mr. Robert Gilmore, Larne.

Deaths.

Authenticated notices are inserted without charge.

Coombs.—At 36 Pier Street, Plymouth, on April 6, Mr. William Thomas Coombs, chemist and druggist, aged fifty-five.

Davies.—At the Barracks Hospital, Newcastle-on-Tyne, on April 10, Private Percy Davies, Ph.C., aged forty. Mr. Davies was employed at the East Ham branch of Parke's drug-stores, and died from the effects of a chill a week after joining the Army. The funeral took place with military honours, at St. Andrew and Jesmond Cemetery, Newcastle-on-Tyne, on April 13. Mr. Davies is survived by a widow and three children.

EDWARDS.—At 21 Shrewsbury Road, Forest Gate, London, E., recently, Mr. William Edwards, chemist and druggist, aged sixty-six. Mr. Edwards, who lived alone, was found dead in his house by the police authorities. At the inquest medical evidence was given to the effect that death was due to heart failure during an attack of pneumonia. The jury returned a verdict accordingly.

GULLIVER.—At a nursing home at Ashey, Isle of Wight, on April 13, Mr. William Inchle Gulliver, Ph.C., 6 Lower Belgrave Street, London, S.W., aged fifty-eight. Mr. Gulliver, who died after a prolonged illness, was a brother

of Mr. W. F. Gulliver, Ph.C.

Hall.—At Worcester, recently, Mr. Frederie John Hall, chemist and druggist, aged seventy. Mr. Hall carried on business in Broad Street, Worcester, for thirty years. He had been in indifferent health for a long time, and latterly had been very ill. He disposed of his business only a month before his death. Mr. Hall was a highly respected member of the Worcester City and County Pharmacists' Association. He is survived by a widow.

Hallaway.—At Warwick Road, Carlisle, on April 12, Mr. John Hallaway, Ph.C., aged seventy-eight. Hallaway served his apprenticeship in pharmacy with the late Mr. Andrew Thompson, of English Street, Carlisle, and, after experience in London, purchased the business of the late Mr. Lind in Castle Street, Carlisle. He carried on business at that address from 1858 to 1892, when he removed to Devonshire Street. Mr. Hallaway was one of the most estimable of pharmacists, and he was specially gifted in training young men. His son, Mr. R. R. Hallaway, Ph.C., Ph.D., succeeds him in the

LLOYD JONES.—At Newport, Mon., on April 17, David Lloyd Jones, chemist and druggist, late of 127 Commercial Street, Newport, Mon., aged forty-cight.

Pearson.—At 48 Ash Grove, Headingley, Leeds, on April 12, Mr. George Taylor Pearson, for forty years warehouse manager to Goodall, Backhouse & Co., aged sixty-two. Mr. Pearson served his apprenticeship with Foggitt & Son, Thirsk, then entered the employment of the Leeds firm in June 1875. He had a very severe illness last summer, and since then had been in failing health, although he was at business on the Saturday preceding his death. He was well known throughout the drug-trade in the North of England. He leaves two sons and one daughter.

RICHARDSON.—At 12 Morningside Place, Edinburgh, on April 16, Gwendoline Cuddon, wife of Mr. Hubert N. B. Richardson, B.A., F.C.S., chairman of directors of John Richardson & Co., Leicester, Ltd.

Staveley.—At 1 Upper Dicconson Street, Wigan, on April 14, Mr. Arthur Proe Staveley, chemist's assistant, aged twenty-one.

Stephenson.—At 9 Woodburn Terrace, Edinburgh, on April 18, Mrs. John Bertram Stephenson, mother of Mr. Thomas Stephenson, Ph.C., F.R.S.E., aged eightyfour. Mrs. Stephenson was a sister of Mr. Alexander Noble, Ph.C., formerly a partner in Duncan, Flockhart & Co.'s Princes Street Pharmacy.

Killed in Action.

Cooper.—At Neuve Chapelle, Private J. R. Cooper, 3rd Battalion Border Regiment, aged twenty-five. Private Cooper, who lived at Heaton Chapel, was till recently employed by James Woolley, Sons & Co., Ltd., Victoria Bridge, Manchester.

Died from Wounds.

MR. LAIDLAW, reader in botany at Cambridge University, has succumbed to a wound received a fortnight ago while on duty in the trenches at the Front. Mr. Laidlaw was one of the draft of 130 sent out two months ago to fill up the 1st Battalion of the London Scottish. This battalion has been doing duty near Neuve Chapelle, and Laidlaw was shot in the breast, the bullet first passing through a sandbag into his body. He died a few days later.

Wills.

Mr. Samuel Henry Venables, chemist and druggist, Gorleston, who died on March 6. left estate valued at 5751. 4s. gross, with net personalty 951. 1s. 9d.
Mr. Henry John Hunt, chemist and druggist, 115 Ophir

Place, North End, Portsmouth, who died on March 14, left estate valued at 1,216*l*. 6s. gross, with net personalty 402*l*. 13s. Probate has been granted to his widow, Mrs.

estate valued at 1,210. 0s. gross, with het personany 402l. 13s. Probate has been granted to his widow, Mrs. Rebecca Hunt, solo executrix.

Mr. Eustace Carey, The Groves, Grassendale Park, Liverpool, alkali-manufacturer, who died on March 3, left estate of the gross value of 10,583l. 11s. 9d., of which 10,279l. 17s. 3d. is net personalty. Probate of his will has been granted to his son, Mr. Edward Carey, St. Michael's Road, Liverpool, Registrar of the University of Liverpool, power being reserved to grant probate also to the other executors. The reserved to grant probate also to the other executors. The testator left his estate upon trust for his children, Walter, Edward, and Arthur Carey and Edith Mary Harrison, in equal shares.

Meister, Lucius & Brüning dropped about four million marks of profit last year, and are paying a 20-per-cent. dividend against 30 per cent. in 1913.

Personalities.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

Mr. L. J. MEYLER, chemist and druggist, was on April 16 unanimously elected Chairman of the Milford Haven Urban District Council.

MR. JOHN BROOKS, chemist and druggist, 15 Flowergate, Whitby, has been re-elected a director of the local Mutual Plate-glass Insurance Society.

Mr. And Mrs. J. Wellesley Douglas contributed a number of violin and vocal solos respectively to a large gathering of wounded soldiers at Stoke Newington on Monday last.

Mrs. Phillips, wife of Mr. Jonathan Phillips, Ph.C., Wigan, has been unanimously elected Vice-Chairman of the Wigan Board of Guardians and Chairman of the Finance Committee.

MR. WILLIAM W. CHURCH, retired chemist and druggist, Alderley Edge, Cheshire, received somewhat severe injuries last week through being knocked down while trying to save a dog from being run over by a passing vehicle.

MR. GEO. W. CRAWFORD, manager of The Pharmacy, Singapore, who has been home on eight months' furlough, sails for the East on May 15 per P. and O. s.s. Mongolia. He will be in London from May 8 to 15, and communications may be addressed to him at 12 Woodland Gardens, Muswell Hill, London, N.

Mr. Robert Ellis, Ph.C., Aberystwyth, has been added to the Commission of the Peace for Cardigan-We regret to record that Mrs. Ellis, wife of Mr. Robert Ellis, met with a serious accident recently, being knocked down by a passing vehicle while endeavouring to avoid a motor-car. Mrs. Ellis was severely injured on the head and was rendered unconscious, but is now recovering.

In our paragraph on Mr. H. J. Fisk, the new manager of Parke, Davis & Co.'s London branch, we stated that Mr. Fisk had drawn the plans of the new Hounslow laboratory. While Mr. Fisk drew all the plans for the internal arrangements of the Beak Street warehouse and offices, the designing of the laboratory at Hounslow was the work of Mr. R. C. Brown, superintendent of the laboratory.

MR. THOMAS CRITCHLEY, J.P., chemist and druggist, Blackburn, celebrated his eightieth birthday on April 15, when he invited several of his magisterial colleagues, including the Mayor (Alderman W. Thompson), and personal friends to meet him at the Sessions House. Mr. Critchley received the hearty congratulations of the company, and thereafter about fifteen of the Justices, including Mr. R. Lord Gifford, Ph.C., accompanied him to the Bench in the Police Court. On returning to the Magistrates' room after the business of the Court, the Mayor, on behalf of those present, expressed pleasure that Mr. Critchley was able to celebrate his eightieth birthday in the best of health. They hoped he and Mrs. Critchley would be blessed with health and happiness for many years to come. Mr. Critchley suitably replied. As noted in the U. & D., April 10, p. 35, Mr. Critchley has presented 1,000U. to the local Royal Infirmary to found a hod in it commenovating his highlighted. found a bed in it commemorating his birthday.

BARCALS CASH CHEMISTS are vacating their shop at 45 South End, Croydon, as the premises are being demolished to make room for street improvements.

DEFICIENT CAMPHORATED OIL.—At the Mansion House Police Court, London, on Thursday, April 22, Spiers & Pond, Ltd., were fined 20s. and a guinea costs, under Section 6 of the Sale of Food and Drugs Act, 1875, for selling camphorated oil containing only 11.2 per cent. of camphor in olive oil. It was explained, for the defence, that a dispenser in the of the oil at a time—4 lb. of olive and 1 lb. of camphor.
On this occasion he decided to double the quantity, and while doing so with the olive oil, forgot to double the amount of camphor.



Postal Address:

C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C. Telegraphic Address: "CHEMICUS, CANNON, LONDON" (two words)... Telephone Number: 3617 CENTRAL (three lines).

INFORMATION WANTED,

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated. Please address us as above:

71/42. "Raydio" or "Raydia" 71/42. "Raydio" or "Raydia" wool (for rheumatism).
71/36. Orlick's trusses: supply.
73/24. Yeast tablets: supply.
75/4. Address of Mr. Z. Hunter,
maker of Wright's Pearl ointment. 1/62. "Cerol," substitute for

74/02. "Cerol," substitute for lysol.
75/55. Liquo Sennæ Dulc.
(Moir).
75/56. "Sparta" tellet-roll.
75/50. Japanese paper aircushions: importers. 75/501. Harrington's Aid " case. " First-

75/502. "Uvalerol" or "Uve-laral." 75/503. "Formalol": supply. 75/18. "Anthea" hair oil: 75/18. "Anthea" hair oil: supply.
77/25. "Potash Icthurian tablets" for purifying water.
77/250. Poudre de riz de Java.
"Maison Lafitte."
77/32. "Sulfo" powder: supply.
68/22. Antiseptised parchment for telephones, etc.
63/46. "Pigmy" or "Pygmy" tablet machine.
78/51. "Lycol": suppliers.
78/67. "Solid Lysol": makers.

Netting for indiarubber bulbs, "Offord" hygienic truss, 68/21 Oiled silk (makers), 41/740;

iled silk (makers), 41/740; (light yellow, French style), 20/30

Continent-mills, 35/37
"Oleoma" antiseptic influenza
perfume, 45/18

Orlex, 33/9, 66/60 Ovoferrin, 60/64 "Own Name" shaving-sticks, 66/101

Pill making and coating machines, 60/11 Plaster-spreading machinery,

Reid's hair-dye, 51/61 Roberts Cornford's lamp, 47/61

Robin's peptonate of iron, 38/60 Rubber teats, 37/47

Rubber teats, 37/47
Russian rubber sponges, 59/68
Salvarsan and Neo-Salvarsan
(War Office inquiry), 37/35
Sterilised dried milk (fullcream and half-cream), 59/35
Sulfobore, 60/65
Sulphuric acid anhydrous (for
Holland), 67/6
"Toinoco" paper handker-

(for

crv-

handker-

fitted glycerin-

Pam-ala, 48/30 Patentex, 67/10 Perfumes, British-made France), 68/19

Phenic acid stals), 48/63

53/52 Radium water, 63/70

"Toinoco" paper chiefs, 51/48

Trypsogen, 56/620 Uricura, 46/31 Urosine tablets, 44/3 Veloin, 63/45

Vulcanite - fitt syringes, 51/55

Vermigelli, 50/24 Veterinary tuberculin, 34/8 Vine styptic. 38/41 Vioform, 46/48

wickering eau de Cologne bottles, 44/43, 51/74 Wool-fat, crude (for Paris), 68/19

Zeno's toilet-specialities, 51/49

INFORMATION SUPPLIED.

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, The CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.:

42 Cannon Street, London, E. Acetyl-salicylic acid, 66/56

"Antelope" brand cream of tartar substitute, 66/61

Anusol (and chemical equivalent), 32/20

"Asepto" bandage, 51/53 Atoxyl, 40/101
Bang's veterinary tuberculin, 55/26
Barff's "Boroglyceride," 65/45 Barff's "Barker's Barker's electric r vibrator, 46/10 Bates' "Frizetta," 40/9 Boehm's toilet specialities, 66/100

Cachet machinery, 61/38 Cartons (Egyptian inquiry), 59/100 Cazo tablets, 63/450 Chemical glassware, 60/441 Chemical stoneware, 39/66 boxes (substitutes), 47/32, Chip be 53/49 Chlorine, 59/50 Clinical thermometers, 53/32

Cartons

Clinical thermometers, 55/32
Crême Simon, 28/1
Cresylic acid, 32/12
"Cursylic acid, 32/12
"Cursylic acid, 32/12
"Cursylic acid, 32/12
"Cursol" foot socks, 53/14
Dale's plaster (makers), 41/
Damschinsky's hair-dye, 56/6
Dixey's lens-testing interesting ment, 30/49
"Durham Dunlex" safe instrurazor, 51/51 " Durham

razor, 51/51
Earthenware pots, 29/1
Eauzate, 40/74
"Ecco" dry cells, 46/41
"Ecco" toilet-specialities, 60/
"Elite" safety razor, 66/102
Eunatrol pills, 58/6
"Eversafe" pacificrs, 66/103

Formalin disinfecting-candles, 58/41 58/41 Gelatin capsules (empty), 68/23 Gentian root (for Japan), 66/251 Gessler's magic headachewafers, 60/42

waters, 00/42 Malt butter, 54/33 Mesothorium salts, 52/39 Metol substitute, 53/63 "Mysantal" tooth-brush, 38/2 Natara, 34/55

N.H.I. scripts, pricers, 65/33

See also "War Wants Exchange" in the Coloured Supplement.

Observations and Reflections.

By Xrayser II.

Mr. Kirkby

still thinks me wrong with regard to the word epithem. I did not, however, set out to show how it ought to have been used, but how it actually was used at the time referred to. In the P.L. of 1746, in Fuller, in Quincy, in Alleyne, in Brookes, in Rennie, and (to come down to our own time) in Cooley's "Practical Receipts," it is applied to solid as well as to liquid preparations. Surely this is enough to establish the point for which I contend. It is not a question of philology, but of history. Whether these solid preparations were "typical" or not, they were called epithems. Cooley adopts the restrictive definition, but the facts are too many for him.

Mr. F. M. Fisk,

whose death you record, was very little in the limelight pharmaceutically, considering the prominence of his position as manager of the London branch of the great American firm Parke, Davis & Co. He was from this point of view not at all a typical American, for he was, as I recall him, singularly modest and retiring. He was, however, typical of that other class of Americans, who, after all, are the best class, in that he stuck to his work with industry and tenacity, and kept a straight course ahead, even in spite of obstacles that might have daunted many a braver man. I well remember the first time I met a Parke-Davis representative, as their travellers are called, and the interesting talk I had with him. That must have been nearly twenty years ago, and I can still recall the misgiving with which I ordered a dozen euthymol tooth-paste, tempted by the neat metal and glass case sent with it. I never thought it would sell, but it did, and I have sold many gross lots since. The English branch of P., D. & Co. is a very different affair now from what it was then, thanks to the manner in which Mr. Fisk carried out the duties entrusted to him.

Mr. Caswell Mayo,

who is a well-known pharmaceutical editor, as well as President of the American Pharmaceutical Association, is to be congratulated on his plucky attempt to defeat the proposal to adopt the term "mil" in place of "c.c." in the U.S.P. The Revision Committee of that publication can hardly have realised the contemptuous indifference with which the change in our new B.P. is regarded by all educated men, otherwise it could surely not perpetrate such an absurdity, which, if carried out, can only expose those responsible to ridicule. A unanimous vote against the proposal is exactly what one would expect from an influential body of pharmacists like the New York branch of the A.Ph.A., and it is to be hoped that the protest will have due effect. It is strange that countries which have never used the metric system in its completeness should commence its introduction by making a muddle of one very important part of it. The use practically of the millilitre and its abbreviation "mil" has never been known, either in pharmacy or chemistry, in countries that use the metric system, and why Britain should have taken a new (and wrong) line is difficult to understand. I hope that our example will not be followed in the new U.S.P.

Your Paragraph on Ancient Remedies

might be made the made the state of a lengthy treatise. I add a word or two on two points only. I read in an old recipe-book that the smell of burning yew will kill rats. Gerard, however, stoutly maintains that yew is not poisonous, which is a singular opinion. Strawberries had a great reputation long before Linnæus. In addition to their cooling properties they were said to be diuretic, hepatic, to have a strengthening action on the heart and brain and a diaphoretic one on the skin. Both the leaves and

the fruit were long official in this country. The very smell of their dying leaves, says Bacon, has a cordial effect; and this notion appears to have survived till the present time, for in one of her shorter stories Mrs. Gaskell makes reference to it as still held. A yet more amiable property of the plant was its resistent power against poison. It not only protected the eater from infection, but was itself immune from infection from other plants and from animals. An old divine quoted by Canon Ellacombe exhorts his readers to be "innocent amidst the hissing of serpents, and as little strawberry-leaves you will not suffer contamination from slimy things creeping near you." But I am afraid my critic in "Ucalites" will think these are not very practical observations!

China Root,

the virtues of which are the subject of the Epistola of Andreas Vesalius to which your Dutch correspondent refers, must not be confused with cinchona (once called China China), a drug unknown in Europe before the seventeenth century. China root came to us from the country whose name it bears, by way of Goa, Chinese traders introducing it to the Portuguese thereas a sovereign remedy for syphilis. Vesalius gave it to the Emperor Charles V. for gout, with such apparent success that the drug obtained a great temporary vogue. Its reputation was not kept up, and it has long ceased to be official with us, though still held in esteem in the East. Some of our old writers believed it to be the root of a species of Senecio; its true source is Smilax China.

The Death of Loeffler

at the comparatively early age of sixtytwo removes from the scientific arena a distinguished bacteriologist whose name will be kept in remembrance as long as diphtheria is with us by his association with the Klebs-Loeffler bacillus, the organism that produces what used to be one of the most fatal of all diseases. Loeffler was one of the greatest authorities on this branch of his subject, but it is to be remembered that we owe anti-diphtheria serum not to him, but to von Behring, another distinguished German, the result of whose work is now seen in the gradual reduction of the diphtheria death-rate from 35 per cent., which it used to be in the 'eighties and for many years before that, to less than 10 per cent. Indeed, in many parts of the country the mortality rate has fallen to less than 5 per cent., while it is well known that where the discase is diagnosed and treated by injection of serum on the first day there need be no death at all. For this beneficent result Loeffler deserves some credit, though if he had not identified the bacillus some other worker in 1884 would soon have done so.

Book-learning

is often decried, and undoubtedly it requires to be supplemented and fortified by first-hand knowledge, but it is astonishing what may be learnt, even in physical science, from books alone. The story told by Sir Robert Ball in his recently published "Reminiscences" of his cousin Reay Green, formerly Professor of Biology in Queen's College, Cork, is a capital instance. When Green got to Cork he found that one of the subjects on which he had to lecture was botany, of which he had made no special study. "So he began, says Ball, "to read it up, and studied with such effectat all events so far as book-knowledge is concernedthat he was able to perform feats that I dare say few expert botanists would be able to accomplish." He says, further, in a letter to a friend, that Green's knowledge of botany was probably unique, inasmuch as though he did not know one plant from another when he saw them, he could recognise any from the description given in Bentham's "British Flora"—truly "an astonishing feat." Speaking from experience, I should say that botany, studied merely in books, is about the least interesting of solutions and if each results are possible. interesting of sciences; and if such results are possible here, where actual contact with the subject is most needed, what may not be done with more abstract sub-

A WORD OF WARNING

In view of the present congested state of the Railways, the Trade generally, and especially the Wholesale Trade, are advised to maintain larger "SANITAS" stocks, and to order supplies as far in advance as possible, so as to avoid the delay and inconvenience which may otherwise be incurred.

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Index Folio 554

GRIMBLE'S MALT

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4 A revolution in the art of Urine Testing."-Medical Press & Circula

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Editorial Articles.

Kingly Beverages.

PENDING the decision of the Government on the question of restricting or prohibiting the supply of alcoholic beverages a section of the community is following the example of the King in abstaining from intoxicating drinks for the duration of the war. Whether these people include many of those by whom alcohol is regarded in the light of a food is doubtful, but the demand for temperance beverages has increased, due partly to the spell of warmer weather. Among the requests which pharmacists are receiving is one regarding the proper strength for barley-water. With the growth within recent years of saner ideas on the alcohol question there has been a tendency to revert to some of the older beverages, such as barley-water, which has become a standard drink at most of the London clubs. Barleywater has been in use for centuries as a demulcent beverage, but the tendency had been to restrict its use to those who are ill. This may have been brought about by its inclusion in Pharmacopæias not only as a beverage, but as a medium for enemas. Under the name of aqua hordeata barley-water per se was first included in the London Pharmacopæia 1745, although in the P.L. 1720 it formed part of the compound decoction of barley which was official as decoctum pectorale. Aqua hordeata became decoctum hordei in the P.L. 1788, and continued under that name until the appearance of the B.P. 1898, which omitted it. The original official formula (translated) for barley-water was as follows:

Pearl barley ... Water

First wash away with water the foreign matters adhering to the barley-seeds; afterwards, half a pint of the water being poured upon them, boil the seeds a little while. This water being thrown away, pour on the seeds that which is left, first made hot; then boil down to two pints, and straight the seeds that which is left, first made hot; then boil down to two pints, and strain.

An alteration in the formula was made in the British Pharmacopæia, 2 oz. of pearl barley being used to obtain a product of "about one pint." The dose was given as "1 to 4 fluid ounces," whereas the quantity of barleywater as a beverage was, and still is, ad libitum.

"Patent" barley-that is, the crushed pearl barley-is now generally used, and in the strength indicated by the older formula quoted above. Barley-water is variously flavoured, and the special brews at London clubs and restaurants owe their flavour to different ideas on this point. Lemon-peel is more usual, and the juice of the lemon is also added to give a slight acidity. Sometimes cream of tartar is employed as the acid ingredient after the style of "Imperial drink," and a few lumps of sugar are generally added. It may be recalled that the old decoctum hordei compositum of the London Pharmacopæia, or mistura hordei co., as it was known in the Edinburgh Pharmacopæia, contained sliced figs, liquorice-root, and stoned raisins, and probably exerted a definite laxative effect. This preparation gives, however, a hint that there is room for distinctive and appropriate flavourings for barley-water. As an advertising idea, chemists might have printed and distribute among their customers an authoritative formula for barley-water. It would probably be much appreciated at the present Another favourite drink in clubs, especially among golfers, is lime-juice and soda-water. Chemists should be able to get a share of the business arising from this-in fact, they will be regarded by the public as advisers on what to drink; and they ought to make the most of the aërated-water business, combining with it the sale of flavoured syrups, cordials, and non-excisable wine-essences, for which many formulas are given in the beverage chapter of "Pharmaceutical Formulas." Some of these afford "short" and "long" drinks. Those who have been accustomed to alcoholic liquors, and have given them up on principle, have a tough mental and physical struggle before them, and relief of the mental struggle is afforded by assuaging the physical desire, as by use of drinks containing ginger and a little quinine or compound tincture of gentian. A favourite effervescing drink of the latter class is "tonic," which is substantially aërated lemonade containing a fraction of a grain of quinine sulphate in each pint. A "long" drink of equal parts of this and brewed ginger-beer is the best beer-substitute for those who have placed reliance on We have no doubt that many other ideas will occur to our readers, who, apart from their business interest in the matter, can help the King's movement in a very practical way by utilising their professional skill and knowledge along the lines suggested.

Panel Pretences.

WE have on more than one occasion recently commented upon the extraordinary allegations regarding chemists' Insurance dispensing profits which have been made by the organisation of panel doctors centred in London; now the Panel Committee of the County of London have formulated for presentation to the Departmental Drug Tariff Committee a long statement which includes numerous tables of figures. This we epitomise elsewhere. In one examples are given showing that chemists may profit up to over 6,000 per cent. every time they dispense 30 grains of sodium bicarbonate, the average of different quantities of this medicament being over 3,000 per cent. The peculiar thing about these figures and the tables of a like nature is that they do not take into account the frequency with which the articles are prescribed and dispensed in the quantities that fall into the different rates of payment. The Panel Committee has completely ignored the fact that this frequency must be considered before arriving at any deduction as to the average per-

centage of profit. We know as a fact that 30 per cent. profit was the basis upon which the Tariff was compiled; and if any article works out at a higher figure it is because there is no coin of the realm small enough to pay for it on the 30-per-cent. basis, not reckoning the fact that the labour and time involved in apportioning the prescribed quantity of the article costs infinitely more than the material. Apart from that, when a proper analysis is made of the quantities in which specific articles are prescribed it is found that the profit rarely exceeds 50 per cent. on the initial cost of the articles in pound quantities. We have no doubt that the statement will be well considered by the Departmental Committee, and that the pharmacists upon it will have effective replies to every assertion that the Panel Committee makes as to chemists' profits on Insurance dispensing being excessive. principal purpose of this note is to submit to our readers in concrete form the methods by which panel doctors are fighting panel chemists in this matter of excessive drain on the Drug Fund. We suggest that one of the objects of this extraordinary attack is to disgust chemists with the whole business, so that panel doctors who want it may get the dispensing to do. Even the Insurance Act Committee of the British Medical Association is showing hostility to chemists, in so far as at a recent meeting they decided to protest to Mr. Montagu that the special Drug Fund from which he is to relieve discounted chemists was not intended to be used for this purpose. "National Medical Journal" is not of this way of thinking, for it says, in commenting upon the grant:

The chemists deserve every sympathy, and are, of course, entitled to payment in full; but the straits to which the Commissioners are reduced, of which this incident affords striking proof, should convince them that the loaves and fishes have long since been distributed among the insured multitude, while the last of the butter, in the shape of the Medical Benefit surplus funds, went to the panel doctors.

Why the British Medical Association should go out of its way to damage chemists' interests it is difficult to understand, but the decision should assure obcurists that they must fight for themselves as hard as they possibly cau.

British Trade Abroad.

WE dealt in general terms last week with the official returns of export and import business from the United Kingdom during March, as well as in the first quarter of the year, showing that imports reached 75,590,918l. c.i.f., in March, this being an increase in values of 8,643,603/. over March 1914 and of 14,248,474l, over March 1913; while exports of goods manufactured in the British Isles were valued at 30,176,066l. f.o.b., being a decline of 14,342,595l. from March 1914 and 11,513,881l. less than in March 1913. The imports of chemicals were valued at 1,464,888l., or 270,000l. more than in the corresponding period of 1914, including miscellaneous chemicals 60,4001. more than March 1914, and unenumerated drugs 44,000%, more. Other increases comprised acetic acid by 2,591 cwt., borate of lime, etc., by 19,523 cwt., calcium carbide by 32,994 cwt., saltpetre by 12,288 cwt., quinine by 108,862 oz., and gambier by 14,814 cwt. Among the heaviest declines were painters' colours and pigments, the imports of which fell by 159,805 cwt., which means less competition for British makers. Coal-tar dyes and dyestuffs fell off considerably, aniline and naphthaline dyestuffs being 24,439 cwt., or 134,212l., less, and alizarine and anthracene dyestuffs 4,177 cwt., or 18,544l., less. Other declines were: cream of tartar (1,942 cwt.),

bleaching-materials (22,190 cwt.), glycerin (615 cwt.), soda compounds (15,174 cwt.), and tartaric acid (1,458 cwt.).

Turning to exports of British manufactures, the decline of 14,342,595*l*. compared with the exports in March 1914 is the lowest since August, the first month of the war. It still leaves our oversea trade at a remarkably high level, considering that the exportation of many things is prohibited and that Government goods are not included in the returns. We show below the fall and rise of British trade since June 1914, the *minus* and *plus* signs indicating the lower or higher margins between the totals of business done in months specified and the totals of the same months in the previous year, re-exports not being included;

			Imports.	Exports.
1914			£	£
June		_	37,000	- 2.964,000
July		_	2,400,000	- 2,759.000
August		_	13,614,000	-19,899,000
September		_	16,304,000	-15,751,000
October		_	20,171,000	-18,021,000
November		_	12,480,000	-20,155,000
December	'	_	3,560,000	- 17,048,000
1915				
January			604 000	-19,558,000
February		+	3.215,000	-15,084,000
March		+	8,600,000	-14,300,000

Exports of manufactured goods fell off last month by 12,411,000l., of which the notable decreases are manufactured iron and steel and cotton and woollen goods, which have each dropped by about 800,000l.; chemicals and allied goods were only 94,288l. less, the total being 1,997,635l., against 2,091,923l. in March 1914, and were it not for various export restrictions and the conservation of our supplies, the figures would be considerably greater. As it is, the exports of medicines and drugs are better by 41,126l, than in March last year, and 86,741l. better on the quarter, as the following figures show:

Although the exports of coal products not dyes still show a falling-off, the figures are much better than they were early in the war. Much larger shipments of aniline oil, toluidine, anthracene, benzols, toluol, tar oil, creosote, etc., are noted. No doubt the accumulation of stocks of many of these coal-tar products has enabled the Government to be more generous in granting exportation permits, especially to countries which undertake to return the bases to us in other forms which we have more need for. Carbolic acid, however, seems to be under strict control, the exports being only 8,259 cwt., against 13,820 cwt. Bleaching-powder, which has been under a cloud since the war began, shows signs of reviving, "other countries" having taken more, but the United States is buying less Soda compounds continue to do well, over and less. 640,000 cwt. having been exported, the chief expansion being in alkali and soda crystals; salt-cake fell from 41,847 cwt. to 6,740 cwt. Crude glycerin shipments rose from 6,528 cwt. to 17,098 cwt., but refined fell from 11,362 cwt. to 9,774 cwt. Copper-sulphate exports were 10,927 tons, or 2,781 tons less than in March 1914, but sulphate of ammonia is not doing badly, shipments being 31,441 tons, against 32,903 tons a year ago, with a slight increase on the quarter.

Undoubtedly the feature of the returns for the completed quarter is the gain of 11,168,000%, shown in imports. This was due to an increase of no less than 22,046,000%, under food and drink, manufactured goods exhibiting a falling-off of 10,533,000%, and raw materials

We paid over ten millions more for one of 136,000l. grain and flour, but only in wheat was there any appreciable decline in quantity; we also spent 3,278,000%. more on meat, but we had much smaller receipts. creased values are, as already pointed out, due in a measure to the exceptionally high freights now charged, the cost being included in the import values, but not in the export values. In dutiable food and drink there was an increase of 6,427,0001., and the gain was accompanied by increased receipts of cocoa, sugar, currants, tea, and spirits. Receipts of raw materials varied considerably; cotton declined by 3,985,000l., but the quantity increased by two million centals; wool expanded by 3,669,000l., the receipts showing a large increase. Among the manufactured goods, which declined over 101 millions sterling, there was a gain of 882,414l, in chemicals, the imports being 4,141,3351. Exports for the three months show a falling-off of 48,986,000l., for which manufactured goods were responsible to the extent of 41,718,495%. The chief decreases were: cotton goods, 15,215,000l.; machinery, 5,450,000l.; iron and steel goods, 5,334,000l.; and woollen goods, 3,880,000l. The chemical exports were:

It would be a mistake to conclude that the above figures indicate a great slump in our manufacturing industries. It is true we have exported substantially less of our products to foreign countries, but the decline is partly due to the cutting-off of certain markets, and in a still larger degree to the diversion of our energies from the manufacture of a large variety of merchandise to the turningout of war-material. The fact must also be kept in mind that ante-bellum anticipations, particularly those of our enemies, were that the works and workers of this country would be starved by war, and that the Empire would fall to pieces. These were incorrect anticipations, and the events and trade figures show that we have the goods or can get them-this being the supreme factor in business whether individual, national, or universal. Herr Ballin, the last of the Germans to contrast the economic conditions of this country with his own, to our disadvantage, buoys up the spirits of his countrymen by telling them that Germans are not sending any money abroad, but are spending it all among themselves, and are piling up the gold reserve, while we are buying from abroad and have to pay in gold-which is the element, along with silver, that balances international accounts. Herr Ballin is entirely wrong about Britain sending gold out of the country. During January, February, and March we imported 208 million pounds' worth of goods, and over 61 millions of gold and silver, exporting 106 million pounds' worth of goods and 41 millions in gold and silver, which means that we got 104 million pounds' worth more than we gave. The difference represents our credit with the world. We have lent money to our compatriots and others in all the ends of the earth, and they pay the interest to us "in kind." Therein lies one of the strongest weapons in the present war; flesh, blood, and the old fighting spirit we have got from our Colonies. The money we have given them is as bread upon the waters: we are getting it back

Substitute for Brandy.

In our issue of April 10, p. 47, we printed a communication from a correspondent to the effect that the National British Women's Temperance Association had recommended a substitute for brandy. The attention of the National British Women's Temperance Association has

been called to this, and we are requested to state that no substitute for brandy has ever been recommended by the Committee of the National British Women's Temperance Association. It is not in accordance with the policy of the Association to recommend any substitute for brandy, and the Association strongly disapprove of the substitute referred to.

The Army Pharmaceutical Service.

We continue to receive from pharmacists in the R.A.M.C. complaints of the manner in which they are treated as regards promotion, and the nature of the work they have to do, much of which is non-pharmaceutical. We observe that "The Hospital" deals with the matter this week, and in the course of the article says:

Under the conditions now ruling in our own Army it is of little use to point to the Pharmaceutical Services of the armies of our Allies and attempt to draw the inference that our dispensers should have commissioned rank because that position is accorded to pharmacists in the French and Russian armies. The first step would be to persuade the authorities here that their present system is fundamentally wrong, and that it is necessary to reorganise the whole of this part of the Army Medical Service. Attempts to do this in time of peace have not been successful, and it is therefore at least doubtful whether in time of war those responsible for the organisation of this service would be recorded for the organisation of the claims of discounts. responsible for the organisation of this service would be more favourably disposed to consider the claims of dispensers than they were at a time when they had more leisure to deal with questions of this kind. And yet qualified dispensers have unquestionably a good case, and, what is equally important, it seems to have been presented properly. It is therefore difficult to understand why the authoriperly. It is therefore difficult to understand why the ties eling to their old-fashioned method of organisation in Service when it could so easily regard to their old-fashioned method of organisation in regard to the Pharmaceutical Service when it could so easily be improved. This fondness for tradition in the case of Army dispensing stands out in strong contrast when one considers the wonderful improvements that have been brought about in other directions. At a time like the present no loyal subject would wish to press the authorities unreasonably, but there can be no room for doubt that the Army Pharmaceutical Service could be organised on better lines than it is.

We heartily endorse these remarks, and we think we are not betraying any secret when we say that Mr. W. S. Glyn-Jones, M.P., has the matter in hand.

Envelopes a Statutory Inclosure.

In the C. & D. Diary, 1915, p. 420, under "Inclosure" ut is stated:

Any dutiable pills, lozenges, powders, tablets, or the like, may be sold unstamped if "merely folded in paper without gum or string," or put in an envelope unscaled.

Also under "Lozenges," on the same page, the following sentence occurs :

In practice eartons (unsealed at the ends) and envelopes (unsealed) are passed.

We have reason to believe that, although these statements represent trade practice, this practice is contrary to the official view, envelopes and cartons being ejusdem generis with "packet," mentioned in the General Charge We therefore advise subscribers in Great Britain to note that they must not sell small quantities of any dutiable medicine taken from a stamped package in anything else than a twist of paper. This fact should be noted on the page of the C. & D. Diary by erasing the sentences quoted.

Retail Sale of Methylated Preparations.

Questions are addressed to us occasionally by subscribers who are not licensed to retail methylated spirit as to whether or not they may legally sell such articles as methylated soap liniment. There being no authoritative declaration on the point, we thought it desirable to write to the Board of Customs and Excise on the matter, and it will be seen from the following letters that a retail dicence is not necessary:

March 27, 1915.

The Secretary.

Board of Customs and Excise,

Lower Thames Street, E.C.

Dear Sir,—On October 11, 1913, you informed me, in reply to a letter which I addressed to you on September 23, reply to a letter which I addressed to you on september 25, that a license to retail methylated spirit is not required in the case of "liniments and lotions prepared with mineralised methylated spirit prescribed by medical practitioners and dispensed by chemists who are not licensed to retail methylated spirits." Would you be good enough

(1) The liniments (soap, etc.) which may, under the long-standing general order, be prepared with methylated

(2) Other preparations of a medicinal character pre-pared with methylated spirit, such as head-lotions con-taining carbolic acid and other parasiticides; and

(3) Any other preparations commonly sold by chemists and druggists, such as French polish and varnishes made with mineralised methylated spirits.

ated spiries.
I am, yours faithfully,
THE EDITOR.

Customs House, London, E.C., April 20, 1915.

No. 9066/1915.

Srr,—In reply to your letter of the 27th ultimo, I am directed by the Board of Customs and Excise to inform you that a methylated-spirit retailer's licence is not necesdirected by the solution with the sale of the articles in question.

I am, Sir, your obedient servant,
J. P. Byrne.

The Editor, The Chemist and Druggist, 42 Cannon Street, E.C.

Laboratory Porcelain,

The exhibit of the British Laboratory-ware Association at the meeting of the London Section of the Society of Chemical Industry is evidence that the Royal Worcester and Doulton's manufactories have overcome the initial difficulties in the production of porcelain crucibles and evaporating-basins, and that with further improvements in the direction of a thinner glaze no difficulty should be experienced in ousting German-made laboratory-ware from the British market. This achievement makes it a matter of interest, to quote from Professor P. F. Frankland's address to the Birmingham Section regarding the origin of the German porcelain-factory. Professor Frankland states:

The great German porcelain-industry owes its origin to alchemistic studies made by Böttcher in the reign of Frederick III. (1688-1713), first King of Prussia. Having succeeded in making gold before witnesses, Böttcher was seized by order of the Elector of Saxony and was "interned" at Dresden, where, although he did not succeed in making the much-desired gold, he founded, along with the physicist Tschirnhaus, the celebrated Dresden porcelain-industry. The astute Frederick the Great (1740-1786) was anxious to manufacture the Dresden ware at Berlin, and to this end commissioned his Court Apothecary, Johann Heinrich Pott, to institute investigations. These attempts were, however, all unsuccessful. The Great Frederick placed much faith in secret agents, and it was by means of spies that he succeeded in discovering the secrets of the Dresden that he succeeded in discovering the secrets of the Dresden porcelain-manufacturer, for at his instigation an enterprising merehant, bearing the name of Gotzkowski, with the assistance of a Saxon workman, brought the secrets of tho Dresden process to Berlin and established a porcelain-factory in the Leipzigerstrasse, which still remains the warehouse for the Berlin porcelain goods. But Frederick later stopped the pecuniary assistance with which the factory had been subsidised, and Gotzkowski was forced to sell the concern to Frederick for a sum of about 30,000*l*., and so was established the celebrated Berlin Royal Porcelain-factory, among the products of which are the well-known crucibles and evaporating-basins.

It may be an additional satisfaction to British chemists to know that by purchasing home-produced porcelainware they are in a small measure ceasing to contribute to the private fortune of the Kaiser whose hideous megalomania plunged Europe into the present war.

THE Government should be ready to subsidise any industry which could make out a good case.—Mr. J. Rutherford Hill.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Medical Evidence on the Drug Tariff.

The Pharmacy Sub-Committee of the London Panel Committee has submitted to the Panel Committee a memorandum of evidence to be placed before the Departmental Committee on the Drug Tariff. Regarding the statement on the first page of the Tariff that the Tariff is that agreed upon between the Insurance, Local Medical, Panel, and Pharmaceutical Committees, the memorandum states that the Panel Committee was not afforded a sufficient opportunity of examining the Draft Tariff, as the Committee was not in existence at the time the Tariff was first issued. In regard to the principle upon which the Tariff is based, it is stated that it is not quite clear what is meant by the statement "that a charge should be made for each ingredient according to its quantity and value, and that an additional charge should be made for time and skill required for dispensing," and it would seem more desirable that the profit to which the chemist is entitled should be the same for every drug, whereas evidence can be produced to show that this is not the case. As to the wastage when drugs are purchased in bulk and retailed in small quantities, the Panel Committee agrees that it is equitable that due allowauce should be made for this, but considers that the chemist is more than fully reimbursed in this respect by the increased rates charged for smaller quantities.

Regarding the method adopted for calculating the Tariff prices of solids, the memorandum continues, it should be remembered that, whereas a chemist purchases a drug at per lb. of 16 oz., which allows him a certain profit. By the Tariff rule he is allowed a further one-eighth on the drachm-price and an

additional one-sixtieth on the grain-price. A table is given to illustrate the gross profit thus obtained. The table gives sets of columns for ounce, drachm, and grain quantities, which we omit; the set of columns shown is for 30-grain quantities. The average is deduced from the factors furnished by the four sets of columns:

	Cost	Pe	Average		
Drug	Price per lb.	Cost Price	Tariff Price	Per cent. Profit	per cent. Profit
Sod. bic Sod. sal	8. d. 0 8 0 2 6 8 4 6 13 3	d. 0.03 0.008 0.34 0.23 0.83	d. 0.5 0.5 1.0 0.5 1.5	1,566 6,150 194 117 83	843 3,158 173 210 63

A table on similar lines is given for liquids. We omit the sets of columns given for ounce, drachm, and minim quantities:

Liquid	Cost Price per lb.	Cost Price	Tariff Price	Per cent.	Average per cent. Profit
Tr. digit Tr. nux, vom Tr. ferri perch Syr. ferri phosph. co Syr. rhei Syr. sennæ	s. d. 3 5 4 0 1 8 0 6.5 1 3	d. 0.17 0.29 0.08 0.027 0.064 0.068	d. 0.5 0.5 0.5 0.5 0.5 0.5	194 150 525 1,751 684 635	144 108 411 558 359 339

allows him a certain profit. By the Tariff rule he is allowed a further one-eighth on the drachm-price and an no observations to make as regards the minimum charge

(1) Case No.	Period, 1914	No. of Prescription Forms	Total Cost of Drugs according to Tariff plus Dispensing- fees	Actual Cost of Drugs to Chemist according to B.D.H.	Difference	Per cent. of Profit (a) with Dispensing-fees, (b) without Dispensing-fees	Dispensing- fees	Average Dispensing- fee per Prescription Form
130 130 326 722 786 244	May June June June June June	470 390 661 113 300 453	£ s. d. 31 5 2 26 7 3 82 9 7½ 7 9 6 14 18 2½ 30 1 3½	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	£ s. d. 17 14 73 15 9 10½ 44 6 9¼ 4 11 3½ 9 11 0 17 13 10	(a) 131.48 (b) 95.5 (a) 130.5 (b) 94.8 (a) 110.6 (b) 84.0 (a) 156.8 (b) 103.0 (a) 177.1 (b) 100.0 (a) 134.6 (b) 110.0	£ s. d. 4 14 8 4 5 6 12 3 0 1 13 11 4 3 9 5 3 10	d. 2.4 1.6 1.09 3.28 3.3 2.7
		2,397	192 11 013	84 3 7	109 7 5	(a) 127.11 (b) 97.8	32 4 8	3.21
(2) 863 325 602 325 1,289 1,239 1,035	May May June May June May May May	75 222 207 188 760 513 274	1 16 7 6 18 11 5 4 8½ 5 18 7½ 23 13 11½ 16 19 9 11 8 4	0 10 9 2 9 6 1 7 1½ 1 18 2½ 5 17 7 4 12 3½ 3 15 1½	1 5 10 4 9 5 3 17 7½ 4 0 5 17 16 4½ 12 7 5½ 7 13 2½	(a) 236.0 (b) 130.9 (a) 180.0 (b) 90.0 (a) 288.0 (b) 159.0 (a) 213.0 (b) 123.0 (a) 308.0 (b) 144.0 (a) 262.0 (b) 120.0 (a) 203.0 (b) 125.0	0 12 2 2 2 6 1 13 4 1 16 10 9 4 8 6 16 2 2 17 0	1.94 2.25 1.93 2.27 2.57 3.18 2.53
		2,239	72 0 103	20 10 7	51 10 3½	(a) 241.0 (b) 127.2	25 2 8	2.69

of $\frac{1}{2}d$. for each ingredient, a number of examples are given showing the price per lb. obtained by a ehemist when certain drugs (e.g., borax, sodii bicarb., alum) are dispensed in 1-drachm quantities. The percentage of profit is calculated at from 1,100 in the case of sodii bicarb, to 2,300 in the case of alum. It is suggested that the minimum charge should be one-tenth of a penny, and that the prices of all ingredients should be worked out to tenths of a penny. These tenths could then be added together when the chemists' accounts are submitted and the total calculated to the nearest halfpenny. With regard to dispensing-fees, it is submitted that, in the case of preparations obtained by the chemist ready compounded from a wholesale house (e.g., cod-liver oil and malt preparations and emulsions, proprietary articles and galenicals, tabloids and saccharin tablets), no dispensing-fee should be allowed, and a definite profit should be charged.

As showing the chemists' profits, analytical tables bottom of p. 114) are given of (1) 2,397 prescriptions of five doctors (average cost high), (2) 2,239 prescriptions of

five doctors (average cost low).

Table (1) gives an average gross profit to the chemist of 127 per cent. The average gross profit from table (2) is 241 per cent. The average profit on the cost of drugs used would seem to be 97 per cent. in the one case and 127.2 per cent. in the other. The average of the dispensing-fees per form is:

> From table (1) From table (2) 3.21d. ... 2.68d.

The following analysis of 958 consecutive prescriptions of various doctors and dispensed in November 1914 by one chemist on the London list is given: Cost of drugs according to Tariff, 36 ℓ . 9s. 7d.; actual cost of drugs to chemist (B.D.H. list), 11 ℓ . 11s. $4\frac{1}{2}d$.; difference, 28 ℓ . 18s. $2\frac{1}{2}d$.; per cent. of profit (a) with (b) without dispensing-fees, (a) 215, (b) 117; dispensing-fees, 11 ℓ . 6s. 3d.; average of dispensing-fees per form, 2.8d.

Anomalies of the Tariff are submitted as follows:

Liniment Terebinthinæ=1½d. per oz. on Tariff. If 2 oz. supplied, the chemist is entitled to charge 3d. for the liniment and 4d. for dispensing it. Emulsion fee, 2d. allowed. As a matter of fact, the liniment in question is often purchased by the chemist ready prepared at wholesale price.

Emulsion Ol. Morrhuæ=Similar to lin. tereb. Dispensing or emulsion fee.

ready prepared at wholesale price.

Emulsion Ol. Morrhuæ=Similar to lin. tereb. Dispensing or enulsion fee.

Liquor Hyd. Perchlor.=Tariff price is 1d. per oz. If 4 oz. are ordered the chemist is entitled to charge 5d., plus dispensingfee. Actual cost: Water ½d., mercury ½d., total 1d.

Pills=According to Tariff, pills are priced at 3d. per doz., i.e., 3s. per gross. The cost price in the majority of instances amounts to 1s. per gross, or even less, when purchased in bulk.

Powders=If 4 grs. calonel is ordered, the chemist is entitled to charge ½d. for calonel and 2d. for dispensing it.

Tablets. e.g., Soda Mint, Formamint=Pot. chlor. tabs. on Tariff 3d. per doz. The chemist obtains them wholesale at 9d. per 1,000, less discount.

Powders=In bulk, such as alum ½d. per oz., starch 1d. per oz., calcii carb. picis ½d. oz., sod. sulphis ½d. per oz. According to the Tariff, the chemist is entitled to charge 8d. for 1 lb., the wholesale price is often only 2d. per lb.

From the foregoing it is submitted that the Tariff is not commercially sound, and should be amended. suggested that a revision might be effected by disallowing the present trade profit and allowing an adequate dis-pensing-fee. This could be arranged by fixing the charge for each ingredient in accordance with the average list-price of, sav. five recognised wholesale houses. The price of, say, five recognised wholesale houses. The chemist would still obtain the profit of the discount allowed by the wholesale house.

Reports from Local Centres.

With special reference to the supply of medicines and appliances. See also Winter Session.

ENGLAND.

Bolton.—At a recent meeting of the Bolton Chemists' Association, Mr. H. Knott presiding, it was decided to request the Pharmaceutical Committee to ask the Clerk of the Insurance Committee if the Panel Committee had reported on the questions in regard to excessive prescribing submitted to them three months ago, and to urge the payment of the Sanatorium Benefit accounts for 1913.

Croydon. -It was reported to the Insurance Committee on April 13 that the Commissioners had authorised a payment not exceeding 50l. to the Pharmaceutical Committee for administrative expenses. The Clerk stated that owing to the large number of the insured who had enlisted it would be impracticable to make a further advance to chemists for the month ended November 11.

Dudley. The Insurance Committee on April 13 agreed, on the recommendation of the General Purposes and Finance Sub-Committee, to pay to chemists 90 per cent. of the amounts of their accounts for February.

Essex.—Mr. J. H. Matthews (Leytonstone) presided at last week's meeting of the Pharmaceutical Committee held in River Plate House, Finsbury, London, E.C. Among the matters considered other than those referred to in our issue of April 17, p. 47, was the rule regarding the absence of members, and it was agreed to waive it during the war, as the Committee had experience that some members may be prevented attending owing to their assistants having joined the Forces. It also transpired that, in spite of certain opposition (including this Committee), a county formulary containing stock mixtures is being prepared for publication. It was agreed that panel chemists should in future send in their prescriptions arranged in bundles, according to the names of the prescribers. In this way the average prices per prescription will be most easily ascertained. It was decided to ask an explanation from a panel chemist in regard to certain medicine dispensed according to a panel doctor who complained about it. Among other matters brought before the meeting was the Dovercourt rural area question, which has frequently been discussed. It was reported that a chemist has now established himself in business there, and the effect of this upon the question will be brought before a future meeting.

Hertfordshire .- At a meeting of the Insurance Committee on April 20, it was reported that the Pharmaceutical Committee has for some time been dissatisfied with the present method of checking prescriptions, as it does not give them the opportunity of a scrutiny unless an entirely fresh check and analysis is made, which would entail additional expenditure. In March 1914 they suggested that a joint committee should be formed of members from the Insurance, Panel, and Pharmaceutical Committees, which joint committee should be responsible for the ehecking arrangements; on account of administrative difficulties the Insurance Committee declined to entertain the proposal. The Pharmaceutical Committee has since approached the Panel Committee, and these two bodies now suggest that one official checker should be appointed who should report to the three committees, 50 per cent. of the cost being paid by the Insurance Committee and 25 per cent. each by the Panel and Pharmaceutical Committees. They state that a checker can be appointed to undertake the complete checking and analysis of the prescriptions and accounts at an inclusive charge of 10s. per thousand. Thus the Insurance Committee would be paying the same amount as at present and obtaining greater statistical informa-tion. In addition, there would be a saving of the time of the clerks engaged in the accountant's office in carrying out the present arithmetical check; if, however, the arithmetical check is earried out by the accountant the checker's fee would be 9s. per thousand. It was pointed out that there would appear to be considerable advantage in the proposed joint arrangement where action is taken under Article 40 of the Regulations, as overlapping and waste of money would be avoided by the simultaneous performance of the necessary checking and statistical analysis, and, having regard to the fact that no additional expense would be caused to the Insurance Committee, it was recommended that the suggestion of the Panel and Pharmaceutical Committees be adopted. The Panel and Pharmaceutical Committees nominated Mr. Ernest J. George, Walsall, as professional checker of prescriptions. The Committee unanimously adopted the report.

Holland (Lines).—At a meeting of the Insurance Committee on April 12, the Medical Service Sub-Committee reported that a panel doctor had refused treatment to an insured patient, whom he charged 1s. 6d. for a prescription, telling him to get it dispensed by a chemist. It was decided to take steps to recover the sum charged, and to deduct from the doctor's next account 3l., incurred by the patient in consulting another doctor.

Tpswich.—At a meeting of the Insurance Committee on April 14, it was stated that the amount available for the payment of chemists' accounts for the quarter ended March 31, 1915, is estimated at 450*l*. The Insurance, Panel, and Pharmaceutical Committees have agreed to bear the cost of checking the 1915 prescriptions in equal proportions.

London.—A meeting of the Insurance Committee was held on April 22, when the Medical Benefit Sub-Committee recommended that payments on account, calculated at the rate of 5d. per prescription, be made to chemists for March and April 1915. The Sub-Committee also reported that during March 1915 the names of eight persons or firms had been added to the panel of chemists, and that during the first quarter of 1915 eleven chemists had resigned from the panel. The Finance Sub-Committee recommended that payments be made to chemists amounting to 540l. for the medical year 1914, and 16,194l. for 1915. The Medical Service Sub-Committee reported consideration of eight complaints against panel practitioners, three of which were substantiated. The Pharmaceutical Service Sub-Committee reported that they had investigated two charges against panel chemists. In the first of these the insured person complained that the chemist refused to supply her with medicine at 11.30 p.m. on Christmas Eve, and she was unable to obtain the medicinc till three days later on account of the Christmas On hearing the chemist concerned, the Sub-Committee decided that the insured person had no adequate ground for complaint. In the second case, it was stated that medicine supplied by a panel chemist was not compounded in accordance with the prescription. After considering the written statements of the complainant and the chemist, the Sub-Committee were unable to arrive at a definite decision, as the sample of the medicine at their disposal was too small for analysis. They, however, expressed the opinion, in view of the fact that chemists, under their agreements, are required to supply drugs of good quality, and the possibility of a medicine supplied to an insured person becoming the subject of a complaint, that the action of the chemist in throwing away the contents of the bottle returned to him was unwise, and should not be followed by a chemist on the panel. They recommended that the chemist concerned be so informed.

London.—A meeting of the Pharmaceutical Committee was held on April 20, Mr. A. H. Jenkin (Vice-Chairman) presiding. Mr. A. J. Wing, Woolwich, was elected a member of the Committee in place of Mr. E. G. Price, Lewisham, who has resigned. Mr. Price's resignation was received with regret, and a vote of thanks was accorded him for his services. A letter of protest from a chemist concerning delay in payment of his account was considered. The Committee had already taken action in this matter, and was still urging speedy payment of all accounts, two further resolutions being directed to be forwarded to the Insurance Committee to that effect. A letter was received from the Insurance Committee regarding payments for the first four months of the year (see above). After these payments have been made the question of future advances will be considered. Regarding representations made to the Panel Committee in the case of two doctors who have resigned from the panel, the Panel Committee asked whether they desired to press for action to be taken under Article 40 in view of the small amounts standing to the credit of these doctors, and the likelihood of the Panel Committee not being able to hear the practitioners. The Committee decided to request the Panel Committee to proceed with the investigations. The Secretary's report contained four complaints from the Panel Committee concerning "Rep. Mist," which were dealt with by him, and, in view of the early publication of the London Formulary, no further action was taken. The Secretary stated that the Formulary is in the hands of the printers, and that copies will be circulated to members of the Conference for final arrangements to be made at their meeting to be held early next week. Information has been received that a pharmacy has been opened for the purpose of facilitating the supply of medicines to the insured in an East-End district, where a firm of doctors have been pressing the Insurance Committee for permission (which has been refused) to dispense for their insured patients.

Middlesex.—The Pharmaceutical Committee met on April 14, Mr. H. E. Clement in the chair. The Secretary (Mr. Hugo Wolff) submitted a letter from the Panel Committee agreeing to the suggestion that no prescription should be paid for unless it is signed with the full surname of the prescriber, that the same apply to locum tenentes where such are employed, and that no metal, rubber, or other stamp be allowed. The Secretary also reported on correspondence with the Insurance Committee regarding the delay in sending "referred" prescriptions for examination and the inability of the checking staff to cope with the accounts as they are sent in. The accounts for November and December are not yet finished, and it was pointed out that even had there been no delay on the part of the Commissioners the failure of the checking staff would still have held up payment. It was agreed to support the establishment of a separate checking staff unless the agreement is carried out and everything brought up to date by the next meeting. Mr. Skinner presented a report on 1,170 prescriptions examined on the question of high cost. He had had these sorted under the names of the doctors, and found 483 were over 9d. These he analysed, and found that the high cost was due to large quantities of tinctures, several of the prescriptions containing quite abnormal amounts. In several cases large quantities of liniments, bismuth salts, etc., were ordered. Emulsions were another cause of high cost, and in one set of prescriptions this accounted for a large number of sixpenny dispensing-fees. The statement was ordered to be sent to the Panel Committee. The report of the Checking Sub-Committee was read, Mr. Skinner pointing out that in January 214 cases were over the county average of 7.3d. The Committee agreed to a suggestion that the checking staff should furnish particulars to enable them to formulate a statement to the Panel Committee. The Secretary suggested that a circular should be sent to panel chemists pointing out how they can co-operate in keeping the cost within the limit. This was agreed to.

Plymouth.—A special meeting of the Three Towns panel chemists with members of the local Association was held on April 15, when the Commissioners' draft scheme for the constitution of the new Plymouth Pharmaceutical Committee (C. d. D., April 17, p. 48) was fully discussed. Reluctance to undertake the duties imposed was so evident and strongly expressed that the meeting considered it quite useless to proceed with the matter for the following reasons:

(a) It is considered probable that it will be difficult, if not impossible, to maintain a satisfactory pharmaceutical service, unless further information as to the prospect of more adequate payments can be obtained. (The payment for March was only 33 per cent. of the accounts rendered.)

(b) The position of Devonport and Stonehouse greatly complicates matters. Pharmacists in these areas were fully paid until amalgamation with the overspent area of Plysial and the page of Plysial parts of the page of the p

(b) The position of Devonport and Stonehouse greatly complicates matters. Pharmacists in these areas were fully paid until amalgamation with the overspent area of Plymouth took place, and, looking at the situation from a business point of view, they feel strongly that they should at once cease to supply goods at a loss. Of fourteen Devonport chemists on the panel, eleven have agreed to resign, but have been induced to postpone any action pending further information from the Commissioners.

(c) While recognising the substantial nature of the concession promised by Mr. Montagu towards the shortage, the area cannot regard this as final settlement of all liabilities; for, though this amount might possibly cover the net cost of drugs and appliances supplied, yet the margin left (if any) for two years' service is unreasonably inadequate.

The meeting felt that the pharmacists of the area have made every effort to maintain an efficient service since the Act came into operation, even at the cost of what they considered a temporary loss, but if payments are to continue at the present insufficient rates they will reluctantly be forced into relinquishing this portion of their business. The meeting therefore proved abortive in fulfilling its object.—We are informed that while the late Pharmaceutical Committees are not only willing but anxious to continue their efforts to tide over the present situation, yet they feel that it is beyond the power of endurance to be asked to undertake the responsibility under the present financial stress.

Preston.—The Insurance Committee on April 15 decided to contribute 250*l*. for the use of the Corporation dispensary and scrvices of the staff, including the services of the tuberculosis officer as medical adviser, under the Sanatorium Benefit scheme.

Salford.—The Clerk reported to the Insurance Committee on April 15 that during March 31,331 prescriptions were dispensed at an average cost of 4.5d. The average cost of drugs per patient was 9.3d.

Southampton.—It was reported at the monthly meeting of the Insurance Committee that ten applications for the post of checker had been considered by the Joint Checking Sub-Committee, and that Mr. A. H. M. Purse, Sunderland, had been appointed at a fee of 5l. 10s. per 10,000 prescriptions. The Sub-Committee also recommended that in cases where tap-water had been ordered and distilled water used, the checker be instructed to allow for the same. Councillor Lewis, in moving the adoption of the report, stated that a communication had been received from the Commissioners, in reply to a letter from the Panel Committee, intimating that there must be no modification of the doctors' prescriptions, and in view of that ruling the recommendation regarding the instructions to the checker must be deleted. The appointment of the checker was confirmed.—It was reported at a recent meeting of the Panel Committee that the list of foods, etc., not allowed to be prescribed has been approved by the Insurance Committee. The Panel Committee has submitted six formulas for stock mixtures to the Pharmaceutical Committee for approval.

Southend-on-Sea.—A meeting of the Insurance Committee was held on April 13. The Finance Committee reported that at a meeting on March 23 they decided to recommend that the Committee apply to the Commissioners for an amount to enable them to pay 90 per cent. to doctors and chemists for the first quarter of 1915. At a further meeting on April 12, however, the Clerk read a letter subsequently received from the Commissioners recommending that $\frac{1}{12}$ of the sums due to doctors be paid. They therefore rescinded their previous resolution, and recommended that 75 per cent. be paid to doctors, leaving available funds for a payment of about 60 per cent. to chemists. Alderman Senier, in moving the adoption of the report, stated that the medical practitioners agreed to accept a smaller payment than they are entitled to in order to enable the Committee to pay about 60 per cent. to the chemists. Dr. Maxwell explained that 1,388*l*. was due to the doctors and 650% to chemists. Their receipts from the Commissioners would amount to about 1,440%. Mr. C. Goode, on behalf of the chemists, thanked the doctors for the way they had met the chemists. He was hopeful that when the Committee have the checker's figures the chemists will receive a little more than 60 per cent., as the figures before the Committee are only approximate. It is unfortunate that the chemists have to face such a deficit at the end of the first quarter. He hoped that, poor as the outlook is, they will finish up better at the end of the year. He could only say that so far as doctors and chemists are concerned they will do their best to remove the incubus on the first quarter. The report was adopted. On the motion of Mr. Simmonds, seconded by Mr. Goode, the Committee decided to send a letter to the Commissioners protesting against their unbusinesslike methods in sending out letters regarding payments on account at the last moment. A letter was read from Mr. C. Goode, intimating his resignation from the Committee, as different business arrangements necessitated his removal to London. The Chairman and Dr.

Maxwell expressed the regret of the Committee at losing the services of Mr. Goode. Mr. Goode suitably replied.

Staffordshire.—In a report presented to the Insurance Committee on April 10 the Finance Sub-Committee stated that for the period October 12 to December 31, 1914, the income on the Drug Fund was 4,456*l*. 14s. 9d., and there is a surplus of 533*l*, 19s. 9d.

West Bromwich.—At the last meeting of the Medical Benefit Sub-Committee, Mr. Kemsey-Bourne drew attention to the fact that various chemicals, such as acetylsalicylic acid, sodium salicylate, sulphonal, phenacetin, acetanilide, phenazone, etc., are now much scarcer and dearer than in August 1914, when the Insurance Committee sent letters to panel practitioners asking them to order these chemicals only in cases of urgent need. He stated that it is much more necessary to send out such a letter now. Mr. Kemsey-Bourne also drew attention to the fact that certain mixtures in the local Formulary would have to be amended or deleted as they become weather, while they were supposed to be in use just over five days. Dr. Edwards agreed. With regard to payment of accounts, the Clerk stated that chemists who failed to send in their accounts in the required time (ten days) would not be paid till the end of the succeeding quarter. He could not say when final payments of the 1914 accounts would be made; the Finance Sub-Committee is awaiting further information and figures from the Commissioners. For the quarter ended March 30. 1915, 90 per cent. (423l.) of chemists' accounts have been paid.

WALES.

Carmarthenshire.—At a meeting of the Pharmaceutical Committee on April 13, it was reported that complaints are still being received regarding the use of "Rep. mist." by doctors in certain areas. It was resolved to request the Panel Committee to urge its discontinuance. It was decided to apply to the Insurance Committee for the payment of two-thirds of chemists' accounts on presentation, the remaining third to be paid after checking, and for information as to why the accounts for "war-scheduled" drugs supplied in 1914 had not yet been paid.

Carnarvonshire.—At a meeting of the Insurance Committee on April 10, the presented a report on the 1913 prescriptions. The scrutiniser had analysed 70,000 prescriptions, and it was found that certain doctors had prescribed at a cost of 1s. 1d. to 11s. 6d. per head. This produced a deficit of 300l. in the 1913 Drug Fund. The Sub-Committee recommended that all doctors whose average exceeded 2s. 9d. per insured person should be surcharged, and to this the Committee agreed.

Montgomeryshire.—It was stated at a meeting of the Insurance Committee on April 13 that chemists' accounts for 1913 amounted to 415*l*., and were paid in full. For 1914 the amount paid to chemists was 383*l*.

SCOTLAND.

Ayrshire.—The Panel Committee has decided that linseed-meal should not be supplied to the insured.

Edinburgh.—At a recent meeting of the Insurance Committee, a letter from the Clerk to the Peebles County Committee, calling attention to the efforts being made by certain Committees to defeat the regulations for the setting-up of the Drug Accounts Committee, was submitted. After considering the several points raised in the letter, the Committee resolved to support the steps about to be taken in combating the opposition. The Medical Benefit Sub-Committee reported receipt of a reply from the Commissioners regarding the Committee's proposal that medicine-glasses should be added to the list of scheduled appliances. Having considered the views of the Panel and Pharmaceutical Committees, the Commissioners are not prepared to agree to the proposal. As to "jaconet," the Commissioners state that they will keep the matter before them in connection with further proposals for additions to the list when it is next revised. The Sub-Committee reported that the

name of Spence's Drug Stores, 11A Causewayside, had been withdrawn from the panel. There were submitted reports by the Panel Committee on various matters remitted to them. In reply to the Clerk's request for a copy of the correspondence on which the Panel Committee based their finding that certain doctors' explanations regarding alleged excessive prescribing were satisfactory, the Panel Committee stated that compliance with the request would be a breach of confidence on their part. They asked that communications regarding excessive prescribing should be made through the Pharmaceutical Committee in terms of the Regulations. It was recalled that the medical members of the Committee had expressly asked that such questions should be remitted direct to the Panel Committee. It was resolved to press for particulars of the information on which the Panel Committee based their decisions. With regard to the question of limiting the doctors' panel-lists, the Panel Committee intimated that they did not propose to take further action. It was stated that this matter is still under consideration by a Sub-Committee, who would report in due course. The following figures regarding chemists' accounts for the first quarter of 1915 were submitted: January, 524l.; February, 618l.; March, 667l.; total for the three months, 1,869l. Of these amounts 90 per cent. has been paid on account, and the balance will be paid immediately the report has been received from the Checking Bureau. It was also reported that 546l., representing the balance in the 1913 Drug Fund, had been distributed to chemists as a second bonus in the ratio of the amounts of their accounts for the year.

Glasgow. The Panel Committee, having considered the explanations of the practitioners concerned in the charges of excessive prescribing by the Joint Committee of the Panel and Pharmaceutical Committees, has decided to report twenty-six practitioners to the Insurance Committee for excessive prescribing, and to request that their names be not published. The Committee rescinded its previous decision to recommend the Insurance Committee to surcharge the practitioners to the extent of 50 per cent, of the amounts by which the cost of their prescriptions exceeds $10\frac{1}{2}d$. per insured person.—At a meeting of the Burgh Pharmaceutical Committee held on April 16 the draft report for 1914 was submitted and adopted. It was agreed to print and circumitted and adopted the submitted and in late along with the report the minutes and joint-report of the sub-committees which investigated the "extravagant prescribing" during the first quarter of the year. Mr. James Moir was co-opted as a member in place of Mr. James Lennox, who has resigned owing to illhealth. The annual report states that eight ordinary meetings of the Committee were held during the year, and one special meeting in conference with the Panel Committee. It also deals with the various Sub-Committees, and in regard to extravagant prescribing details the steps which were taken by the Sub-Committee on that subject. It was found that fifty-seven practitioners prescribed in such a way that the average per insured person exceeded $10\frac{1}{2}d$., the amount being 1,324l. 18s. 8d. Two meetings of panel chemists were held in June and November, when the policy of the Committee as to the terms of service and the advisability of continuing on the panel was adopted. During the year the Committee decided various questions of principle. The Committee state that the cost of drugs and appliances for 1914 will not greatly exceed 1s. 9d., but will certainly fall within the 2s. limit. The total charges upon the Drug Fund in 1913 were 27.522*l*. 16*s*. 11*d*., and in 1914 30,458*l*. 17*s*. 3*d*. The first and second quarters of 1914 were much higher than those of 1913, but the third and fourth quarters were less. Although 700l. is the sum actually available for the Committee's expenses, only 49l. 3s. 6d. was expended out of the advance of 50l. from the Insurance Committee, the payments consisting of: Postages, 3l. 14s. 6d.; hire of rooms for meetings, 3l. 15s.; stationery and printing, 4l. 14s.; telephone (proportion), 3l. 10s.; use of typewriter (proportion), 3l. 10s.; honorarium to Secretary, 301.

Kirkcaldy.—At a meeting of the Insurance Committee on April 16, the General Purposes and Finance Committee submitted the reply of the Commissioners to a claim by the Committee for a payment from the "Drug Suspense Fund," stating that the Fund is not on a quarterly, but on a yearly, basis, and the Commissioners are meantime unable to entertain the Committee's claim until definite information regarding the state of the Fund is obtained. It was pointed out that in 1913 and 1914 it had been necessary to apply nearly the whole of the "floating six-' in payment of the chemists' accounts, and there is every possibility that the accounts for the current year will more than exhaust it. It was decided to ask the Commissioners whether they will admit the Committee's claim in the event of the 1s. 6d. per insured person proving insufficient to pay the chemists' accounts for 1915 in full.

Notes.

CHEMISTS' FRIENDLY SOCIETY.—At a meeting of the Board, held in Glasgow on April 15, the Manager reported that the Government audit is finished for the first eighteen months up till January 11, 1914. The surplus on administration account was found to be 76l. 16s. $1\frac{1}{2}d$. Sickness and Maternity Benefits work out at less than 4s. per head of membership.

membership.

The Panel Medico-Political Union.—A meeting of medical practitioners on the Glasgow and West of Scotland panels was held in Glasgow on April 15 to consider the formation of a Glasgow branch of this body. Dr. Thomas Colvin presided over an attendance of between thirty and forty doctors. Dr. A. Salter (London) addressed the meeting, and after a prolonged discussion it was decided by fifteen votes to ten that a Glasgow branch of the Union be formed. Several of those present refrained from voting.—A meeting under the auspices of the Union will be held on April 22 at the Connaught Rooms. Great Queen Street, W.C., to protest against the proposed reduction in payments to panel practitioners as suggested in the circular letter issued by the Commissioners to Insurance Committees. In the notice of the meeting it is stated that the reduction is uncalled for, and that it is unfair in its incidence, a practitioner whose list is composed mostly of women being more adversely affected than one whose list contains men of military age. The Union one whose list contains men of military age. The Union has arranged the meeting in order to obtain the views of the profession on the matter. Other points regarding the remuneration of practitioners under the Insurance Act will also be discussed.

Pharmaceutical Society of Ireland.

Council-meeting.

THE Council met at 67 Lower Mount Street, Dublin, on Tuesday April 17 Mar. D. Wolfert, Dublin, on Tuesday, April 13, Mr. D. M. Watson (President) in the chair. Dr. Charles J. B. Dunlop, Dr. J. A. Walsh, Messrs. Thomas Batt, G. D. Beggs (Hon. Treasurer). Richard Blair, Joseph H. Bowden, Wm. Doig, James Michie, Thomas N. Moffitt, John Smith, James Tate (Vice-President), W. F. Wells, and M. R. Whitla, J.P., were also present.

FOR ACTIVE SERVICE.

The REGISTRAR (Mr. Ferrall) stated that he had been informed by Dr. Ninian Falkiner that he is leaving on active service, having been appointed to take charge of a R.A.M.C. base hospital. Dr. Falkiner had asked him to convey to the Council his grateful thanks for their uniform kindness to him during several years of office, first as an Examiner and subsequently as Director of the School of Materia Medica and Botany.

Co-option of a Member.

Mr. Albert Owen Welis, Ph.C. (Dublin) was co-opted as a member of the Council in place of Mr. John Burnett (Kingstown), resigned. Dr. A. J. Barnes (Dublin) was also proposed, and received five votes, seven being recorded for Mr. Wells.

DEATHS.

The Registrar submitted letters from the following giving notification of deaths:

Mr. Edward H. Bedford, notifying the death of Mr. John Joseph Pierce, Ph.C. Mr. Edward Brennan, notifying the death of Mr. Bar-

tholomew Brennan, chemist and druggist.

Mr. Peter J. Colleran, notifying the death of Mr. John Bourns, chemist and druggist.

Mr. P. Walsh, notifying the death of Mr. Martin Carey, chemist and druggist.

Mr. P. Carroll, notifying the death of Mr. Patrick
Carroll, chemist and druggist.

Miss N. Cunningham, notifying the death of Elizabeth M. Cunningham, chemist and druggist.
M. Cusack & Sons, notifying the death of Mr. Michael

Cusack, chemist and druggist.

The representatives of J. Flynn & Sons, notifying the death of Mr. James Flynn, chemist and druggist.

PRELIMINARY REGISTRATION.

Communications were submitted from Miss E. J. Ethel Small and Mr. T. J. McKee, enclosing certificates of other bodies and desiring Preliminary registration. The Registrar submitted a further communication stating that Miss Small had died since her application had been sent in.

The Council directed the Registrar to return the fee to

Miss Small's father, and to convey their sympathy with Mr. McKee was him on the death of his daughter.

admitted to Preliminary registration.

CHANGES OF ADDRESS.

The following changes of address were intimated:

The following changes of address were intimated:
Mr. J. Corbett, Ph.C., from Knockanevin, Kihmallock,
co. Limerick, to the Medical Hall, Mitchelstown, co. Cork.
Mr. J. D. Hackett, Ph.C., to 41 West Fifty-fifth Street,
New York, U.S.A.
Mr. A. L. Hanrahan, Ph.C., to the Tallow Pharmacy,
Tallow, co. Waterford.
Mr. R. Gordon McKinstry, Ph.C., from Belfast to the
Donegal Pharmacy Co., Ltd., The Diamond, Donegal.
Mr. Luke Kingsmill, R.D., to 9 York Villas, Emmet
Road, Inchioore, Dublin.

ELECTION OF EXAMINER.

For the examinership in the Practical Pharmacy division of the Pharmaceutical Licence examination, which becomes vacant when Dr. W. V. Johnston, M.P.S.I., which becomes vacant when Dr. W. V. Johnston, M.P.S.I., retires this month after five years in office, applications were received from Mr. John Burnett, M.P.S.I., Kingstown; Mr. H. Corbett Meyrick, M.P.S.I., Newmarket, co. Cork; Mr. Arthur Mortimer, M.P.S.G.B.. Harrogate; and Mr. David Warwick, M.P.S.I., Percy Place, co. Dublin. The voting was as follows:

For Mr. Burnett.—Messrs. Watson (President), Beggs (Hon. Treasurer), Bowden, Michie, Doig, Blair, Moffitt, Smith, Dr. Dunlop, and Dr. Walsh—10.

For Mr. Warwick.—Messrs. Tate (Vice-President), Wells,

For Mr. Warwick.—Me Batt, and Dr. Whitla—4.

Mr. Burnett was accordingly elected.

OTHER BUSINESS.

The following reports were submitted and adopted: The Law Committee, the Certificates Committee, the Declarations Committee, and from the Registrar reporting the deaths of Mr. Patrick Benson, chemist and druggist, Eliza L. Daly, chemist and druggist, and Mr. Wm. John McNeight, chemist and druggist.

A letter was submitted from Mr. Ernest Ahier with reference to the recognition of pharmaceutical chemists of

Ireland in Malta and Gozo.

April Examinations.

The following are the results of examinations held in Dublin:

Examination.—Jeremiah Pharmaceutical LicenceO'Connor, Castleisland, co. Kerry, passed with honours. The following also passed: Joseph Reynolds, Belfast; Julianna Keegan, Athy; James Frederick Addy, Belfast; Joseph Patrick Dowling, Newbridge, co. Kildare; Joseph Walsh, Ballyhahill, co. Limerick; Frederick Armstrong Ferguson, Lurgan; John King Lyons, Clanabogan, Omagh; Sara Allen Sloan, Belfast. Twenty-one candidates were rejected.

Registered Druggist Examination.—The following passed: Herbert Edward MeIlroy, Belfast; Harry Collopy Smith, Dundalk; George Victor Harris, Dublin.

candidates were rejected.

Pharmaceutical Assistant Examination .- Francis Loughman, Dublin, passed.

Trade Notes.

LAND IN HOLLAND for drug-growing and for factories is offered by proprietors, who may be addressed, Z., 5955, Albert de Lange, bookseller, Amsterdam, Holland.

"SALUDOR" FILTERS are the latest thing in apparatus for water-purification, and are made on the Pasteur system by the Fulham Pottery and Cheavin Filter Co., Ltd., Fulham, S.W.

Santonin.—Mr. S. Tolkowsky, 57 St. Gabriel's Road, Cricklewood, London, N.W., is the London representa-tive of Mr. I. L. Goldberg, Borovaja 9, Petrograd, the official seller of Russian santonin.

DRUGGISTS' SUNDRIES.—Henry W. Bush & Co., Ltd.. Rembraudt Works, Commercial Street, London, E., enumerate special lines in druggists' sundries, and offer to send quotations to the wholesale and export trade.

LEWIS MANUFACTURING Co., 67 Dale Street, Liverpool. make a speciality of thin and odourless paraffin oils for brilliantine and perfumes. These oils are refined in this country, and quotations can be obtained on application.

A NEW CATALOGUE of bottling, tube- and tin-filling machines, mixers, and similar apparatus, manufactured by Roberts' Patent Filling-machine Co., may be obtained on application to them at 33 Roundcroft Street, Bolton.

British Thymol.--Mr. H. Rubeck, 59 Mark Lane, London, E.C., informs us that he has now succeeded in producing thymol of a quality which most favourably compares with the German article, and which is also fully up to the B.P. standard.

WILLS'S UNIVERSAL POSTAL SYSTEM is really worldwide, for Mr. G. S. V. Wills, 402 Clapham Road, London, S.W., the originator, has extended it to cover all pharmaceutical examinations in the British Empire at an inclusive fee of one guinea, apart from postage.

THE ROYAL VINOLIA SHAVING-STICK is a true British product; indeed, we recall its introduction as one of the first shaving media to be compounded on modern lines. It now retails at 9d. per stick, and its eompanion, the Royal Vinolia Tooth-paste, at 6d. and $10\frac{1}{2}d$. per tube.

OPTICAL GOODS.—F. Darton & Co., manufacturing opticians, 142 St. John Street and 52 Clerkenwell Road, London, E.C., refer especially in their advertisement in this issue to cyclist and motorist goggles and eye-pro-tectors, reading-glasses, and London-made automatic

The "Roche" Alkaloids and Fine Chemicals made the Hoffmann-La-Roche Chemical Works, Basle, Switzerland, can be obtained by export buyers direct from these works, but orders should be addressed to the Hoffmann-La-Roche Chemical Works, Ltd., 7 and 8 Idol Lane, London, E.C.

Zetts Cloth-ball Bonus.—O'Neil, Zetts & Co., 22 Walbrook, London, E.C., are during April executing all orders at the rate of thirteen to the dozen. Readers will note that only one week remains for them to take advantage of this bonus on an article which is always in demand, and is profitable.

SURGICAL DRESSINGS.—Robert Bailey & Son, Clegg Hall Mill, Smithy Bridge, Lanes, are manufacturers of all kinds of surgical dressings, including bandages, gauzes, lint, and wool. They manufacture for wholesalers only, and their London representatives are Ogilvy & Co., 18 Bloomsbury Square, W.C.

THE STANDARD OPTICAL Co., LTD., 59-62 Hatton Garden, London, E.C., advertise in this issue spectacle and eyeglass frames and mountings, lenses, opticians' machinery, spectacle and eyeglass eases, and eyeglass-chains. Attention is also called to the Standwear finger-piece mounting, and an offer is made to send samples.

SHIRLEY BROTHERS, LTD., Whitecross Works, London, S.E., are making a special feature of the production of tube-goods, and quote in this issue their series of toilet creams and jellies, tooth-pastes, and ointments, packed in collapsible tubes ready for display on the counter. Buyers can have their own name and address on these.

AMERICAN-MADE CHEMICALS.—The Verona Chemical Co., North Newark, N.J., specialise in the manufacture of vanillin, terpene hydrate, heliotropine, terpineol, thymol, also-eugenol, oxidised turpentine oil, etc. Several of these articles are in short supply since the war broke out, so that intending buyers would do well to inquire for prices.

APENTA WATER is still in demand. Apollinaris & Johannis, Ltd., a British company, with headquarters at Stratford Place, London W., secured the entire output of the springs in Hungary about twenty years ago, Consequent on the war, they now submit reasons, in an aunouncement in this issue, why chemists should support this important British enterprise.

REITMEYER, CALBURN & KINDERSLEY, LTD., is the name by which the business of Reitmeyer & Co., 63 Crutched Friars, London, E.C. (now incorporated), will in future be known. The company are sole sellers in the British Empire for chemicals produced in Allied and neutral countries, and they offer special facilities for shipment direct from these sources to buyers abroad.

RADIUM LUMINOUS PAINT.—There has been a great demand since the war broke out for a radio-active paint to use on the dials of wrist-watches and compasses, and it is therefore of interest to note that Mr. F. Harrison Glew, radium expert, 156 Clapham Road, London, S.W., makes this paint as well as other radio-active preparations, and quotes for them in an advertisement in this issue.

"EUCRYL" and "Lycryl" are words to conjure with. The former, as Eucryl Tooth-powder, is known throughout every part of the British Empire, and "Lycryl" is a preparation of the lysol character made by Eucryl, Ltd., in England. The inquiry-coupon included in their announcement may be addressed to 61 and 63 Lant Street, Southwark, London, S.E., or to any of the agents mentioned.

"Neptune" is the name of a Belgian weekly shipping paper which, during the temporary occupation of Belgium by the Germans, is being published in London at Bank Chambers, 329 High Holborn, W.C. It is printed in French and English, and the subscription rate is 6s. 6d. per annum. The commercial information given is of importance to future traders with Belgium, and in connection with the newspaper there is an information department, the object of which is to facilitate shipping business.

The B.F. Goodrich Co., Ltd., 117-124 Golden-Lane, London, E.C., are well known all over the world as manufacturers of indiarubber goods. They figure in their announcement in this issue their moulded red-rubber hot-water bottle, which is noted for its substantiality. A similar product is the combination and fountain douche. The firm are also manufacturers of atomisers, catheters, bulbs and bulb outfits, rubber corks, surgical tubes, and all other kinds of chemists' sundries made of rubber.

The "Service" Cornplane.—Mr. F. C. Barkham, 118 Queen's Road, Bury St. Edmunds, is the maker of a practical and useful instrument for planing corns. It is immensely superior to corn-razors and corn-files and quite safe in use; in fact, in corn-cutting it bears the same relation to the razor as the safety razor for shaving does. The "Cornplane" is made to retail at 1s. and 1s. 6d. each, and chemists should make a lot of money out of it. It may be obtained from the maker or through sundries-houses.

ADEPS LANE.—The Hillcrest Oil Co. (Bradford), Ltd., Clayton, Manchester, are the first British firm since the war commenced to produce lanoline and the official varieties of adeps lane on a large scale, and these are marketed under the description "Silvercrest." For some time after the war broke out the production of lanoline in this country seemed almost hopeless, but with characteristic enterprise the Hillcrest Oil Co. have kept at the production, and now are able to supply an article which satisfies the official requirements.

WOUND-TREATMENT.—The advertisement in this issue of W. Martindale, manufacturing chemist, 10 New Cavendish Street, London, W., deals with cresol ointment and addine sterilising capsules, which are of especial interest

at the present time as a means of treating wounds acquired in war. The cresol ointment is produced as the result of the investigations referred to in the recent Hunterian Oration, and it is put up in tubes of special form. The iodine sterilising capsules are completely cased in wool, this form having particular advantages, which are set forth in the advertisement.

Tartacream is an improvement upon cream of tartar, manufactured by The British Wheat Salts Co., Priorsleigh Works, Moseley Street, Birmingham, which is much used by bakers, and it is well worthy of the attention of chemists and druggists as a profitable article for retail. Those in business abroad are invited to write to Meyer, Bridgens & Co., Ltd., 7 Mark Lane, London, E.C., in regard to terms and agencies. The manufacturers may be written to by others, and the names of wholesale agents in various parts of the country are mentioned in their announcement.

"Red Club" Catalogue.—Barnett & Foster, Niagara Works, Eagle Wharf Road, London, N., have issued a new price-list of the "Red Club" brand soluble essences, fruit and confectionery essences, essential oils, colours, drugs, and other materials used in the aerated-water, brewing, wine, and confectionery trades. These are products of their own laboratories. The list is well arranged, and most items have a telegraphic code-word against each for use in emergencies or otherwise. It is an exceedingly varied list, and is published in home and export editions. Copies can be obtained on application to the above address.

FILERITE ASBESTOS.—The use of asbestos in pharmacy and the allied industries for filtration-purposes has become familiar through the adoption of the Seitz asbestos filters. Manufacturing chemists were put to considerable inconvenience through being unable to obtain the particular variety of asbestos required for the purpose. Bratby & Hinchliffe, Ltd., Ancoats, Manchester, at once took the matter in hand, and have completed the erection of a plant for the manufacture of filtering-asbestos. This the company are now supplying under the name of "Filbrite." We are informed that the material has been tested by some large users and pronounced to be perfect.

SAFETY-RAZORS.—Mr. William P. Kelland, manufacturers' agent and hardware factor, 36 Camomile Street, London, E.C., has forwarded to us a copy of his latest illustrated catalogue of safety-razors, etc. Attention is directed to the fact that these safety-razors, blades and cases, are entirely British-made, and Mr. Kelland claims to have superseded the Continent for these goods at a competitive price. Mr. Kelland informs us that what was previously a side-line has become a new trade, and that the makers are unable to deliver the goods fast enough. The catalogue contains excellent illustrations of twenty-five designs, the retail prices ranging from 1s. to 10s. 6d. It is well worth the attention of chemists.

"Entente" Carbolic Tooth-powder.—We have received from F. Newbery & Sons, Ltd., samples of their "Entente" carbolic tooth-powder, the third of the patriotic series issued by them. Those already on the market are the "Royal Standard" and "Union Jack" tooth-powders; these are pink dentifrices, while the new "Entente" powder is a white powder. It is put up in two sizes, neatly got up in banded enamelled tins, having in the centre of the cover the Union Jack, flanked by the flags of our Allies. Chemists can have their names and addresses printed on the band. The powder is agreeably flavoured, and is pleasant in use. Prices may be obtained on application to the firm.

Armour's Animal Products.—Few things are more eloquent of the progress of economic methods and their application to old-established industries than are the laboratory-products offered by Armour & Co., Ltd., Holbern Viaduct, London, E.C. Some of the most important remedial agents introduced in recent years are of animal origin, and a quarter of a century ago were included among the waste products of the abattoirs. Now they are utilised and produced in the Armour Laboratories under aseptic and scientific conditions. The company give a list of these and of digestive and other

preparations in an announcement in this issue, emphasis being given to the advantage of Armour beef-extract in making medicated wines, a special quality being produced for this purpose. Prices can be obtained on application to the above address.

"Christy Specialities."—Thomas Christy & Co., 4, 10, and 12 Old Swan Lane, Upper Thames Street, London, E.C., inform us that they have taken over the entire stock and sole sale of "Zana Carbonated Baths," and that in future all inquiries, orders, etc., will be executed by them. Prices remain as before. Zana Carbonated Baths can be prepared instantly, without trouble and without injury to the bathfittings, and are equal in efficacy to the natural carbonated baths of Nauheim, Marienbad, and Kissingen. By the use of the special aërating cushions supplied regular and long-continued effervescence is secured, and the water therefore becomes fully saturated with the gas. These baths are specially indicated in gout, rheumatism, sciatica, and all conditions where improved circulation is desired. The firm are also makers of T. M. Smoker's Tooth-powder, with which they supply combined tooth-brush and T. M. "counter-salesman." With orders for one gross (cost 27s.) materials for a window-display are provided, in connection with which we may remind our subscribers of the proved selling-power of a window devoted to one line only. The powder is advertised at 6d. per tin, and is on the P.A.T.A. at 4½d. Non-separating Toilet Lanoline "Christy" is a seasonable line which the makers claim to be equal to any on the market. The firm solicit inquiries in regard to these products.

Balsam of Tolu.—An Editorial article in the "Perfumery and Essential Oil Record" for April is devoted to tolu balsam, in the course of which it is stated that the requirements of the new British Pharmacopeia for this article are certainly stringent, and there is considerable difficulty in obtaining samples which will answer the tests prescribed. We have found that the official method of estimating the proportion of balsamie acids is not satisfactory, since the whole of the cinnamic and benzoic esters are not soluble in carbon disulphide. By the use of the method described under "Styrax," without previous extraction with carbon disulphide, nearly double the amount of total balsamic acids can be obtained, and we suggest the amendment of the monograph on the following lines: "2.5 grams of the balsam tested as described under "Styrax Præparatus' should yield not less than 0.5 gram of testal balsamic acids calculated as cinnasia.

Thus amended, the method of valuation is an improvement on the test described in the 1898 edition, which was based on the experiments conducted by Braithwaite in 1895 already referred to.

Results of the examination of three recent samples are given, these showing wide variation in the "Constants"—e.g., carbon disulphide extraction was 28.3, 51.7, and 43.6 per cent. and total cinnamic acid by the modified B.P. process, 28.1, 20.4, and 29.0 per cent. As the second of these samples showed 33.5 per cent. of cinnamic acid and 5 per cent. of resin acids by Delphin's process, the Editor (Mr. John C. Umney, F.C.S.) is continuing experiments with that process.

GALYL.—In the treatment of syphilis quite a number of organic salts of arsenic are employed, such as atoxyl (soamin), orsudan, arsacetin, arsenophenylglycin, lectine, salvarsan, neo-salvarsan, and, lately, galyl. All these have had rapidly curative effects in certain of the lesions of syphilis, and all have one characteristic in common—the presence in their molecule of one or more benzene chains in which one or more of the hydrogen atoms have been replaced by an atom of arsenic-and it is to this that the efficacy of the compounds in the treatment of syphilis is due. Galyl, the newest of these compounds, has been synthesised by the French chemist Mouneyrat, and is prepared at the Naline Laboratories, Villeneuve la Garenne, France. A sample has been sent to us by M. Bresillon & Co., Gamage Buildings, Holborn, London, E.C. Galyl is tetroxy-diphosphamino-diarsenobenzene, and is a rather more complex body than salvarsan (dioxy-diamido-arsenobenzol-dihydrochlorate), but it is claimed by the inventor, as the results of clinical trials, that galyl is without vaso-dilator tendencies and less neurotropic than

salvarsan. The arsenic-content of galvl is 35.3 per cent. its phosphorus-content 7.2 per cent.; and as sent out for intravenous injection in ampoules, it is a light-yellow powder consisting of galyl and an appropriate amount of sodium carbonate to make it easily soluble in distilled water to form an isotonic solution. It must be prepared immediately before use. The dose stated on the label is 0.25 gram, but from the literature on the subject it. appears that three doses are given at intervals of a week of 0.45, 0.50, and 0.55, or 0.35, 0.40, and 0.45, the doses varying according to the requirements of the case which is being treated. It is stated that the Wassermann reis being treated. It is stated that the Wassermann re-action is generally negative one month after the last injection. Galyl is also used for sleeping-sickness, and the simplicity of its preparation for the purpose of administration is an advantage, sterilised distilled water only being required. It has been used in French hospitals for over two years, and, so far, no accident due to toxicity has been recorded.

FINE-ART PRINTING.—In the course of a visit to Raphael House, Moorfields, London, E.C., the home of Raphael Tuck & Sons, Ltd., fine-art printers, our representative had an opportunity of examining a selection of calendars, Christmas cards, patriotic postcards, and other specimens of their high-class fine-art printing. The collection of calendars inspected embraced some 400 new designs beautifully reproduced in colour, photogravure, etc. The leading lines are the "Daily Engagement Calendars" and the ever-popular "Block" calendars. The former have proved one of the successes of the year.
The latter are remarkable as historical records, accompanied by delightful pictures representing scenes from English history, the works of Dickens, Shakespearean story, etc. The quotations have been drawn from a wide range of literary giants, so that all tastes are met in this respect. Mention must also be made of a particularly neat line of pocket-calcudars. All these are specially adapted for business presentation. repertoire of Christmas cards includes no fewer than 5,000 designs, the wide range of subjects appealing to every taste. Pride of place must be given to the "Pot-Pourri" series—a highly artistic card to which is attached a miniature perforated jar containing fragrant (real) pot-pourri. These scented cards are particularly suitable for chemists who handle Christmas stationery. Among others worthy of special mention, the "Water-colour" and "Gobelin" series strike us as the choicest art cards ever shown. The prices vary from 5s. to 6d. per box of six. In the remarkable series of picture postcards, those of the natriotic type were strongly in evidence. Those of the patriotic type were strongly in evidence. representing types of the Army and Navy are the work of noted naval and military artists, and are accurate to the smallest details. A particularly fine piece of work is the postcard reproduction of Messrs. Tuck's well-known picture, "Defenders of the Empire." This picture and the postcard reproductions of it are sold for the benefit of the Prince of Wales' National Relief Fund, and in this connection, it may be noted that Messrs. Tuck have already forwarded to the Fund a first cheque for 1,000l. on account of sales of this. The picture is also issued in the form of a "zag zaw" puzzle (300 and 400 pieces). and these have proved the means of lightening many an otherwise weary hour to wounded soldiers in our hospitals. Much of the fine-art work previously sold in this country was produced in Germany, but the products of Raphael House are entirely of British manufacture, and afford conclusive proof, if such were needed, of the excellence of British workmanship,

The B.P. 1914.—In spite of the titanic struggle in which the British nation is engaged, the launching of the new British Pharmacopæia has been smoothly and successfully effected (states the "Medical Press"). This is the more remarkable in view of the many radical alterations contained in the new edition, including the adoption of a fresh metrical system. Then, again, there is the disturbing fact that a considerable number of medical men are bravely engaged in war duties. That the new Pharmacopæia was able to rise superior to such circumstances is due to the remarkable calm that surrounds the daily life and avocations of the people.

Manchester Pharmaceutical Association.

THE annual meeting was held at the Albion Hotel, Piccadilly, Manchester, on April 14. The President, Mr. Jas. Grier, M.Sc., was in the chair, and about thirty

members were present.

ANNUAL REPORTS.—The Hon. Secretary (Mr. T. Miller) presented his report of the work of the Association during the past year. This referred to the Conference of Local Associations, the alterations in the regulations for the Manchester Scholarship, the work done in connection with the Worsley Hall Red Cross Hospital, the supply of medicines to the dependants of soldiers and sailors, and the subscription raised on behalf of the Belgian Doctors' and Chemists' Relief Fund.

The President, in commenting on the report, said that the past session had included a very trying time, but, considering all things, Manchester chemists had reason to feel proud of the work they had done during the past session. He particularly referred to the raising by the Treasurer (Mr. Pidd) read his report, which stated that 164 members had paid their subscription, and there is a balance in hand of 571., against 381. last year. The meeting then carried votes of thanks to the President, Treasurer, and Hon. Secretary, and these officers suitably

COUNCIL ELECTION.—The President then announced the result of the election of the Council of twenty-four, all the retiring members of Council being re-elected. Only flifty-six voting-papers were received, which caused the President to remark that the members of the Association were evidently satisfied with the work of the Council.

Mr. W. Kirkby, M.Sc., F.L.S., then read his paper

PHARMACOPŒIA REVISION.

The first part was a history of the origin of official books of medicinal formulæ, and the lecturer added that the College of Physicians does not appear to have had any Jegal right conferred upon it to prepare such a Pharmacopeia. When the Pharmacopeia was ready for printing our trusty and well-beloved the President and College or Commonalty of the Faculty of Physick in our City of London" approached the King for the "Royal Privilege and Liones" for the college on the college of and Licence for the scle printing and publishing of it for fourteen years, which was, of course, granted in proper form. Then a "Proclamation" was made "commanding "eommanding apothecaries to follow the dispensatory lately compiled by the College of Physicians of London." The terms of this proclamation were continued to the edition of 1851. Since the appearance of the British Pharmacopæia, the proclamation as to its legal obligations upon compounders makes its appearance in the "London Gazette," and not in the book itself. Each succeeding edition, as viewed to-day, has characteristics marking it off in a great or less degree from enaracteristics marking it on in a great or less degree from its predecessors, but in none of them is there an apparent effort to bring them thoroughly up to date before we reach the edition of 1836. Richard Phillips (a chemist and drug-gist who became editor of two important scientific journals, lecturer on chemistry at the London Hospital, and subse quently at St. Thomas's Hospital, official chemist and curator to the Museum of Practical Geology, President of the Chemical Society, and Fellow of the Royal Society) published "An Experimental Examination of the last Edition of the Pharmacopæia Londinensis" in 1811. So forceful, accurate, and judicious were his criticisms in this book and a similar one written by him in 1816 upon the reprint of 1815, that the College appointed him official translator to the edition of 1824. From that year until translator to the edition of 1824. From that year until May 1851 he was connected with the Pharmacopæia as editor and translator, and was engaged upon the last edition at the time of his death. In connection with this last edition the name of Mr. Warington, of the Apothecaries' Hall, must be mentioned. For thirty years pharmacy had a pretty close connection with the national medicine-book.

When the General Council of Medical Education, in virtue when the General Council of Medical Education, in virtue of the Medical Act of 1858, decided to compile a British Pharmacopæia, "of the several functions conferred on "them," not one caused the Council more apxiety than the preparation of the British Pharmacopæia." How indifferent was the B.P. of 1854 is fairly well known. The difficulties encountered in the reconciling of the London,

Edinburgh, and Dublin Pharmacopæias were, no doubt, great; but there seems reason to think that really felt they had undertaken too much, because they had to call in the assistance of Professor Redwood, of the Pharmaceutical Society, and Mr. Warington, of the Apothecaries' Hall, to prepare immediately a new and im-

Apothecaries' Hall, to prepare immediately a new and improved edition, which appeared in 1867.

There is no need to tell how the edition of 1885 was edited by Professors Redwood, Bentley, and Attfield, that of 1898 by Professor Attfield, and that of 1914 by Professor Greenish in conjunction with Dr. Tirard.

This short survey has been given with the notion of showing how invented by the professor that the conjunction of the professor of the professor that the professor invented by the professor that th

showing how incontestably the physicians have been dependent upon the work of chemists in providing a satisfactory National Pharmacopæia. The recognition which has been accorded to pharmacy hitherto has been of such a meagre description that Mr. Edmund White three years ago felt compelled to make a protest which was unmistak-able in its character. Mr. J. C. Umney, in his British Pharmaceutical Conference address for 1913, was so emphatic as to say that the 1914 Pharmacopæia was the last one in which pharmacy would co-operate under present conditions, and the Council of the Pharmaceutical Society a few weeks ago passed a resolution as to "the unsatisfactory position of pharmacists in relation to the production of the British Pharmacopoia." And the Council made certain British Pharmacopæia." And the Council made certain recommendations as to the attitude of its professors and

officers in respect to any future issue.

Mr. Kirkby was not prepared to discuss Mr. Umney's proposals as to legislation upon this question, because the possibility of legislation on the subject seems to be a very remote one. But there is something which may be done remote one. But there is something which may be done at once. The first thing is for every pharmacist to follow the lead of the Council of the Pharmaceutical Society follow the lead of the Council of the Pharmaceutical Society and refuse to assist in any way until the Council is satisfied that proper recognition will be made for the services rendered. As far as he could see, the law only says that the Pharmacopeia shall be published under the direction of the Medical Council, in whom is vested "the exclusive right of publishing, printing, and selling the said Pharmacopeia," and they "shall cause 'it' to be altered, amended, and republished." There is not a single word that precludes the formation of a joint committee of medical men and pharmacists to do the work of altering and amendmen and pharmacists to do the work of altering and amending. Until such a state of affairs is brought about, therefore, he suggested that every pharmacist in the country should support the Pharmaceutical Council. It must not be overlooked that ten years ago the Pharmacopæia Committee of the General Council caused to be collected, by men not connected with the Pharmaceutical Society, the various criticisms which had been published with the intention of using them for the succeeding revision. The arrangement came to an end for two or three reasons, but it is possible the Apothecaries' Hall may be approached again; but, seeing that its Licentiates are not pharmacists, it is to be hoped that such will not be the case. If pharmacists are free with published matter providing material for the next tree with published matter providing material for the next revision, it will most certainly be used by the General Council. It is to be hoped, however, that this body will devise some way of conciliating a body of men who have hitherto been by no means stingy of giving of their best. To assist in bringing the desired end to pass, Mr. Kirkby suggested reducing the amount of published matter as much as possible, but at the same time providing ample materials for the next revision—that is, materials for the pharmaceutical part of the work. Let the Council of the Pharmaceutical Society organise a Pharmacopæia Commission, with sub-commissions dealing with different branches of the with sub-commissions dealing with different branches of the work. A large amount of the work could be done free of cost, and with Professor Greenish as director of such a Commission a great body of investigation could be carried out by several small but very capable committees. All of which work would be at the disposal of the pharmaceutical members of the Pharmacopæia Committee when this is appointed. Some such scheme as this provides a means of dealing with a difficult situation, and he hoped this matter would receive adequate discussion before Pharmacopæia criticisms become abundant.

The discussion which followed was mainly commendatory, and was followed by a vote of thanks to Mr. Kirkby, proposed by the President and seconded by Mr. J. Cleworth.

COPPER SULPHATE—A note published by the French Ministry of Agriculture states that importers of sulphate Ministry of Agriculture states that importers of surplate of copper will find in Great Britain all the quantities they may require, and insists on the necessity of their speeding up their orders, the British Government having other orders to satisfy, and desiring that the French requirements should be made known without further delay.

Trade Report.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, E.C., April 22, 6.30 p.m.

THERE is a continued confident tone about the chemical **1** and drug markets, but the volume of business has fallen off somewhat; last week's drug-auction certainly proved a success, as a very fair quantity of goods also changed hands subsequently. The position of such chemicals like the salicylates, acetyl-salicylic acid, phenazone, phenacetin, thymol, etc., remains much as before; but it is to be noted that people are becoming much more cautious in purchasing, which may be regarded as a healthy sign. At present the market for some of these synthetic chemicals is in the hands of a small clique of dealers who manipulate the market in accordance with their own interests, and fix unreasonable prices, instead of letting the usual governing factors of supply and demand operate. The chief alterations include an advance in salol. Tartaric acid is $\frac{1}{6}d$. higher, and citric acid very firm; milk-sugar is easier owing to arrivals. Bromides are tending firmer. Ammonia sulphate is steadier and arsenic lower. Potash bichromate, potash caustic, and sal ammoniac are dearer; oxalic acid firmer. In drugs, cod-liver oil is quiet and the turn easier. Curação aloes continues very scarce. Balsam Peru has again advanced; belladonna-leaves are offered at easier rates. Japanese slab camphor is higher on spot and to arrive. Ergot and senega have been in improved demand, the latter being firmer. Opium is steady. In essential oils, lemon to arrive is easier. Bergamot and orange are firmer, especially the former. American peppermint is firm, cajuput and wormseed are dearer.

Higher	Higher Firmer		Lower		
Aeetic acid Antimony Balsam Peru Cajuput oil Lead compounds Potash bichromate Rosin Sal ammoniac Salol Soda caustie Turpentine	Ammonia sulphate Bergamot oil Camphor, Jap. slabs (spot and c.if.) Cottonseed oil (cr.) Gentian Gengers Oxalic acid Quinine (sec. hands) Tartaric acid Wormseed oil	Belladonna- leaves (c i.f.) Coconut oil Cod-liver oil Linseed oil Menthol Milk-sugar Palm oil (Lagos) Pimento Rape oil (cr.)	Arsenic Lemon oil (c.i.f.) Tallow		

Cablegrams.

Bergen, April 21.—The cod-fishing at Finmarken is promising; market for finest non-congealing medicinal oil is dull, at about 170s. per barrel c.i.f.

New York, April 21.—Business in drugs is quiet. Opium is 10e. per lb. iower at \$7.20 for druggists' by single cases. Menthol is 5c. easier at \$2.80. Peppermint oil in tins is quoted at \$1.60 per lb. Hydrastis has been advanced to \$4.80. Balsam tolu is firmer at 42c. Short buchu-leaves have been reduced to \$1.30, and balsam Peru is 5c. easier at \$2.60 per lb.

London Markets.

ACETIC ACID is dearer for all strengths, in accordance with the improvement in lime acetate. The price of 99 to 100 per cent. glacial in carboys is now 52l. to 52l. 10s., and for technical 80-per-cent. in casks 40l. is quoted and 42l. in carboys. Prices of acetic acid have advanced over 100 per cent. since the war.

ACETYL-SALICYLIC ACID.—Several lots are being offered on the market by the wholesale trade, which points to the fact that the searcity is not so acute as is made out. Small lots are obtainable at from 20s, to 22s. 6d, per lb. It is of interest to note that the price in Germany to-day is m.470 to m.570 per 100 kilos, as to quantity (equal to 2s. 6d, to 3s. per lb.).

ALGES.—Curação continues very scarce, and high prices are paid by needy buyers; a few boxes of good pale liver offer at 87s. 6d. and capey at 79s. The exports from the Union of South Africa during January amounted to 89,553 lb., valued at 618l., against 68,999 lb., valued at 793l., in January 1914.

AMMONIA SULPHATE is steadier. London is quoted at 12l. 15s. per ton net, naked at works, for 25-per-eent. ammonia; Hull 24-per-eent. is 13l. 10s. (6s. 3d. higher), Liverpool is 13l. 10s. (5s. higher and business done), and Leith is 2s. 6d. dearer at 13l. 15s. per ton, in bags, f.o.b., less 3½ per cent.

ANISE OIL.—Star is unchanged, with sellers of "Red Ship" brand at from 3s. 11d. to 4s. spot and 3s. 7d. to 3s. 8d. e.i.f.

Arrowroot.—About 1,500 barrels have lately been sold at, including fine manufacturing, up to 4d., good ditto $2\frac{3}{4}d$. to $2\frac{1}{4}d$., and common to fair 2d. to $2\frac{1}{4}d$. per lb.

Arsenic is on the easier side, best white English powder offering at 18% in barrels and 19% in kegs.

ATROPINE.—Prices vary from 85s, to 90s, per oz. for sulphate, with great difficulty in finding supplies.

Balsam Peru.—Very searce, with retail sales at from 14s. to 15s, per lb. on spot. A feature of the situation in New York (says the "N.Y. Commercial" of April 10) was-the heavy demand from France, Belgium, England, and Russia for balsam Peru. It is understood that over 99 per cent. of the total supply which had been available in the United States since last August has been taken by the Allies for wound-dressing preparations.

Balsam Tolu.—A small business has been done at 2s. 3d. per lb. for good hard.

Belladonna-leaves to arrive are offered at 290s. per cwt. c.i.f.

Bergamor Oil, as intimated last week, is decidedly firmer, sellers quoting 12s. 6d. to 12s. 8d. per lb. c.i.f. for 38-percent, esters.

A Sicilian advice, dated April 10, states that the quietness of demand both locally and from abroad produced a depression at the beginning of the last fortnight, and some business was closed with foreign buyers at the low prices which then seemed possible; but, as has often happened this season, as soon as holders noticed the demand, they immediately advanced their pretensions, and we have to report a firmer market.

Brownbes.—Although the prices are nominally unchanged at 4s. for potassium, 3s. 6d. for sodium, and 3s. 9d. for ammonium, slightly higher prices are being obtained for spot parcels, and offers of substantial quantity are somewhat difficult to obtain from the United States, as makersthere are exceptionally busy. The prospect is therefore for a farther advance later.

BUCHU.—The exports from the Union of South Africa during January amounted to 3,659 lb., valued at 3861., against 16,074 lb., valued at 3,3081., in January 1914.

CAMPUT OIL.—Business has been done at 4s. 3d. per bottle of 21 ez.

Camphor (Refined).—The sales include 200 eases Japaneso $2\frac{1}{2}$ -lb. slabs at 1s. $4\frac{1}{2}d$. to 1s. $4\frac{3}{4}d$. c.i.f. for May-June shipment, being dearer. At the moment slabs are somewhat searce, but arrivals are anticipated shortly: 1s. 9d. to 1s. $9\frac{1}{2}d$. has been paid on the spot; 1·oz. and $\frac{1}{4}$ -oz. tables are also quoted at 1s. $9\frac{1}{2}d$.

CANABIS INDICA.—A fair spot stock of true Bombay tops is available at 7s. per lb., with one holder asking 7s. 3d. The recent increase in the Indian Excise-duty brings the impost to rather over 6s. per lb., compared with 5s. 2d. previously.

Canthardes.—From parcels now landing Russian flies are available at 12s. per lb.

CARDOLIC ACID.—Business is being done only under official permit, and from makers 1s. 7d. per lb. has been paid for 39° to 40° C. crystals in small lots.

Castor Oil.—English make is quoted at 41*l*, per ton for first-pressings in barrels for prompt delivery, 39*l*, for May-June, and 34*l*, 10s, for July-December. Finest medicinal quality is 3*l*, 10s, over the price of firsts, and oil in tins and cases 3*l*, per ton over the respective price in barrels f.o.b.

Cinchona.—At auction on Tuesday 82 bales African practically all sold at from 6^3_8d . to 6^3_4d . for good quill, 4^1_8d . for

bold part broken quill, and 3d. for broken quill. The auction to be held at Amsterdam on May 6 will consist of 1,020 packages, weighing 59,924 kilos. The first-hand stock at Amsterdam on April 15 consisted of 11,625 packages Government and 58,290 packages private bark, including the first-hand quantity to be offered on May 5 and 6.

CITRIC ACID is very firm at 2s. 6d. per lb.

Cocains.—At the moment there is no ease from the stringency, but it is anticipated that the makers, who are extremely busy, will shortly be able to give quicker delivery, when, it is believed, there will be a reaction in prices, which it is thought have already reached their maximum. Spot supplies of hydrochloride are, of course, extremely difficult to find, a fair value of such being 15s. to 15s. 6d. per oz., less 5 per cent. It is understood that the price of cocaleaves is a less important factor than formerly, owing to the increased cost of actual production from the ecgonine in coca-leaves. This has become expensive owing to the rise in solvents, labour, and fuel.

COCA-LEAVES.—The auction to be held at Amsterdam on May 6 will consist of 3,629 packages Java, weighing 194,873 kilos.

Cocoa-butter.—English is quoted at from 1s. $4\frac{3}{4}d$, to 1s. 5d.

Cod-liver Oil remains quiet, and in some instances quotations have been withdrawn; in one quarter a bid of 165s. c.i.f. London would be put forward for finest new Lofoten medicinal oil, with up to 175s. c.i.f. quoted by other agents. New oil to come forward is quoted 180s. ex wharf London, war-risk included, and 170s. for 1914 oil.

Our Bergen correspondent writes on April 12 that the results of the cod-fishing are still below expectations, and no improvement can take place as regards the winter fisheries. The Finmarken season is about to start, and the prospects are good, as there is reported to be plenty of the small fish ("lodde") to attract the cod to the coast. However, the catch there has hitherto been next to nothing. The official report gives the following results up to April 10:

	1912	1913	1914	1915
Catch of eod (millions)	61.8	36.1	57.6	46.8
Yield of c.l.o. (hect.)	47,200	23,600	42,900	39,100
Yield of liver for raw oils				,
(hect.)	7,950	4,900	8,190	6,600
(2000)	1,000	1,000	0,200	0,000

The market is very quict, with a rather weak tendency. Prime non-congealing oil is freely offered at 175s, per barrel c.i.f. Bergen, but there are no buyers, and a firm bid of some 5s, below this figure would be accepted. The total exports from Norway to the end of March 1915 amount to 39,745 barrels, against 9,489 barrels at the corresponding date of 1914.

According to cabled advices sent from Brodr. Aarsaether, of Aalesund, to their London agents (Freudentheil & Co.), the official figures up to April 17 are as follows:

	Livers	Yield of
Catch of	for raw	c.l.o.
eod	oils (bect.)	(hect.)
Lofoten, 1915 15,500,000	 1,323	12,291
do. 1914 11,600,000	 990	9,577
Whole country, 1915 48,600,000	 7.150	40,056
do. 1914 59,900,000	 8,566	44,831

The fishing has now been closed in most districts, and in a week or two will be finished everywhere south of Finmarken. In Lofoten from 650 to 750 livers are required to fill one hectolitre, yielding 40 to 45 per cent. oil.

COLCHICUM-SEED.—Market is practically bare and nominal at 95s.

Cream of Tartar is firm, at 145s. for prompt delivery and 140s. to arrive.

Dragon's-blood.—Practically all the reboiled Singapore lump has been cleared. The *Deucation* has brought 11 cases from Singapore.

ERGOT.—A fair business has been done on the basis of 2s. 8d. to 2s. 9d. spot for Spanish.

Galangal is now plentiful on this market, a recent arrival offering at 30s. per ewt.

Gentian.—Sellers ask the higher price of 32s. 6d. to 33s. per cwt. spot.

GERANIUM OIL.—Bourbon is steady at about 10s. per lb. on the spot.

GINGER.—Sierra Leone is rather firmer in Liverpool, with sales at 25s. 6d. and buyers of new crop at 26s., but no sellers under 27s.; other descriptions are also firmer. New-crop Jamaica, it is said, will be small, and several parcels have been withdrawn from the market here; higher freights and fewer sailings from Jamaica have also to be reckoned with. Spot sales of Calicut have been made at 30s.

HELIOTROPINE.—Crystals are offered at 8s. 9d. per lb.

IPECACUANHA.—Spot holders of Cartagena have put their asking-price back to 10s., but a near bid would probably lead to business, as there is a fair stock of the drug available and a few more are expected. Meanwhile 11s. 6d. is quoted from New York.

LEMON OIL.—Very fair arrivals continue to take place from Sicily, but there is not much room for a further reduction in spot prices, the values being from 4s. to 4s. 6d. for good brands; to arrive from 3s. 6d. to 3s. 7d. c.i.f. is quoted, being easier.

A Sicilian advice, dated April 10, states that the general position has not been subject to any radical alteration during this last fortnight, although the slight disposition of sellers to transact at present low prices is still evident. Despite this reluctance on the part of sellers, a fairly good business has taken place both locally and with abroad. Our market, resenting this rather active demand, has demonstrated a stiffening tendency; but higher prices could not be maintained, and, while we have to report a firmer tone, prices can be left unchanged. The uncertainty of the present political moment influences the attitude of buyers and sellers, and prevents our market taking a definite course.

LIME OIL.—For the moment second-hands only offer, and $3s.\ 7\frac{1}{2}d.$ is quoted for fair West Indian distilled.

LYCOPODIUM from parcels now landing is quoted at 4s. 6d. MENTHOL.—Quiet and easier, at from 10s. 9d. to 11s. per lb. spot, latter price for quantity. A sale of Suzuki for May-June shipment is reported at 9s. 9d. c.i.f.

The exports from Japan during January were as follows:

1914

37.062

1915

27,650

1913

Yen	•••		7,940	283,158	145,229
The coun	tries o	of desti	nation we	re:	
			1913	1914	1915
			Kin	Kin	Kin
British	India	•••	888	1,100	2,616
Great I	Britain	•••	12,631	11,488	6,313
France		•••	2,475	2,475	8,339
German	оу		7,460	10.033	_
U.S.A.			4,119	9,683	9,766
Other	oountri	AG.	565	2 281	616

METHYL SALICYLATE is becoming scarce again, and the price has improved slightly, being worth from 8s. to 8s. 6d. per lb., the lower price having been freely paid.

28,138

Total

MILK-SUGAR.—Fair arrivals are taking place, and finest powdered is selling at 72s. per cwt. for finest Continental quality.

NEROLI OIL is selling in small lots at from 12s, 6d. to 13s. per oz for finest French.

OILS (FIKED).—Linseed is easier, spot pipes offering at 35s. 9d. and barrels 36s. 6d. Cottonseed is firmer, at 30s. for crude in pipes on spot, 32s. for pale refined in pipes, and 35s. to 37s. for sweet refined. Ceylon Coconut is easier at 47s. for hogsheads, 46s. for pipes, and afloat 44s. 6d. c.i.f. Cochin on spot is 50s. to 52s., and afloat 47s. c.i.f.: London-pressed for April-May is 42s. Rape is casier, at 38s. 9d. to 39s. for ordinary brown crude, naked, on spot, and 41s. to 42s. for British refined in barrels. Lagos Palm is 35s. 9d. in Liverpool and 40s. on spot. Turpentine is 3d. higher on the week, closing at 36s. 9d. for American on spot and 37s. 1½d. for May-August.

OPIUM is steady, with a small spot business at 23s. for Salonica 11-per-cent. and 25s. for 12-per-cent.; business is also being done on c.i.f. terms. Persian is quiet and somewhat nominal at from 17s. to 22s. as to test.

ORANGE OIL.—A Sicilian advice, dated April 10, states that a better feeling prevailed, and the transactions were closed at higher prices than last quoted. Prices as quoted in London by agents are irregular, varying from 5s. 9d. to 7s. c.i.f.

Orris.—Florentine is unchanged at 43s. per ewt. c.i.f., and on the spot the value of good sorts is 50s.

Oxalic Acid.—Sales have been made at 11d. per lb. in limited quantity; demand is by no means heavy.

PALMAROSA OIL.—We note the arrival of 14 pots from Bombay; the spot price is from 10s. to 11s. per lb.

PARAFORMALDEHYDE powder is quoted at 3s. 6d. per lb. Peppermint Oil.—Bullish advices continue to be received from America, with some holders off the market. Spot holders quote 7s. 6d. for finest brands. H.G.H. has been selling at 13s., London terms, with 13s. 3d. now asked.

PHENACETIN is quoted at from 17s. to 17s. 6d. per lb.

Phenazone.—Small lots are obtainable for spot delivery at from 22s. 6d. to 25s. per lb.

PIMENTO is easier, at from 2d. to $2\frac{1}{16}d$. per lb. spot.

POTASH BICHROMATE.—The makers have advanced their price by 1d. per lb. to 7d., less 5 per cent. Bichromate of soda and other chrome salts remain as before.

POTASH CAUSTIC.—The prices now being quoted are such that its use is being discontinued in many soapworks and substitutes are being found. Buyers may be cautioned in stocking it at the inflated price of 120s., which is asked for 38 to 90 per cent.

POTASH IODIDE.—The exports of potash iodide and crude iodine from Japan during January were as follows:

		1913	1914	1915
		Kin	Kin	Kin
Potash iodide		8.019	7,461	12,875
Crude iodine	•••	1,814	6,018	51

POTASH PERMANGANATE is offered in limited quantity at from 170s. per cwt. up to 180s, and more, according to circumstances; sales have been made at from 170s, to 175s.

Potashes. - First Montreal are quoted 701. per ton.

Pyrogallic Acid.—Crystals are quoted at 8s. and resublimed at 9s. per lb. to arrive.

QUININE has attracted more attention, and second-hand prices are firmer, at from 1s. 1_4^3d . to 1s. 2d. for the usual brand of Continental sulphate.

RESORCIN.—Crystals are offered to arrive at 6s. 6d. per lb.

Rosin.—The largest sales of rosin ever reported at a single call in the history of the Savannah naval-stores trade were reported on April 9 by the "New York Commercial" corre-Various exporters were the purchasers.

SAGE.—New-crop French is offered to arrive at 56s, per cwt. in pre-war times the price was about 15s.

SAL AMMONIAC has advanced 31. per ton, makers quoting firsts lump at 521., seconds 501.; firsts crushed or ground 541., and seconds 521.

SALICYLATES.—A small business only is passing at the present inflated prices. Sodium of American make is quoted at 10s. 6tl. and salicylic acid at about 8s. per lb

SALOL has been more in demand, but there is difficulty in

getting quantity; a fair value is 8s. 6d. per lb.

SARSAPARILLA. Small sales of fair red native Jamaica have been made at 1s. 2d. per lb., and for Vera Cruz 10d. is

SENEGA has been in more inquiry, with sales up to 2s. 3d. per lb net on spot.

SENNA.—The Clan Murray has brought 763 bales Tinnevelly, which will probably be offered at the next auction. They are badly wanted. Meanwhile very high prices are asked from importers' hands.

SHELLAC remains quiet, with the usual standard TN Orange quality offering at 60s. to 61s. AC Garnet is 61s. and GAL

62s. Futures have been inactive.

SODA NITRATE is comparatively scarce, and higher figures are asked—viz., 131. for ordinary and 131. 10s. for refined.

SQUILL.—For good white near at hand 22s, per cwt. is

STRYCHNINE.—The prices for the pure crystals from makers are from 2s. 2d. to 2s. 3d. per oz., according to quantity, being an advance of 2d. on our previous prices.

TARTARIC ACID is firmer, with English makers booked up to June delivery; spot is now 1s. $6\frac{1}{2}d$.

TERPINEOL is quoted at from 2s. per lb. upwards.

THYMOL is quoted at 24s. spot for German-made crystals from ajowan-seed.

TONKA-BEANS are one of the very few articles which have declined since the war, owing to the fair stocks and poor demand. Good black Para are obtainable at 1s. 9d.

VANILLIX.—The prices in our last issue should have been from 26s. to 27s. per lb.; small spot sales have been made at 26s. 6d.

WAX. BEES' .-Wax. Bees'.—At auction in Liverpool 25 bags Sierra Leone realised 71. 5s. per cwt.

WAX, VEGETABLE.—Japanese has been sold at 48s. e.i.f. for May-June shipment.

WORMSEED OIL is firmer, American offering at about 8s. 6d. to 9s. per lb. on the spot.

In the Coloured Supplement

of this issue will be found our report of Continental Chemical and Drug Markets and the Heavy Chemicals genort.

Arrivals of Chemicals and Drugs.

During the period April 14 to 20 inclusive the following produce from the places mentioned in parentheses has arrived at the English ports stated. Goods in transit are not included. The figures denote packages where not specifically described:

To London.

Acetic acid (Rotterdam) pkgs. 87, (N. York) brls. 246
Albumen, egg (N. York) cs. 11, (Shanghai) cs. 76
Alcohol (N. York) brls. 1,500
Aloes (Cape) es. 46
Aniline dyes, colours, etc. (N. York) pkgs. 37, (Rotterdam) pkgs, 46
Anise oil, star (Hang-Kong) as Mastich (Patras) es. 5

Anise oil, star (Hong-Kong) cs.

100
Antimony er. (Shanghai) es. 200
Areca (Colombo) bgs. 38
Argol (Messina) pkgs. 581,
(Barcelona) eks. 127
Arsenie (Oporto) brls. 127
Benzoin (Singapore) es. 45
Bismuth ore (Sydney) bgs. 14
Borie acid (Leghorn) brls. 100
Buchu (Cape Town) bls. 8
Calcium carbide (Odda) dms. Calcium carbide (Odda) dms.

Canary-seed (Moroeco) bgs. 251 Cannabis ind. (Calcutta) cs. 2 Cantharides (Shanghai) cs. 3 Cardamom-seed (Colombo)

pkgs, 21 Cardamom shells (Colombo) Cardamom shells (Colombo) 6 Cardamoms (Colombo) pkgs. 212 Cashew-nuts (E.I.) pkgs. 717 Cassia. (Port Said) cs. 100, (Alexandria) 112, (Hone-Kong) 150. (Marseilles) 200, (Lásbon) 600 Castor-seed (Bombay) bgs. 4,200 Chemies! product; medicines

Castor-seed (Bonnary) 1983, 4,200 Chemical products, medicines, etc. (N. York) pkgs. 1 161, (Portland, M.) es. 16, (Tre-port) cs. 8, (Dieppe) cs. 10; drugs (Baltimore) bxs. 60, (Boulogne) cks. 13

Cinchona (Calicut) 15 Cinchona (Calicut) 15 Cinchona and elips, etc. (Colombo) pkgs, 755 Cinnamon oil (Cevlon) cs, 32 Citrate of lime (Syracuse) cks. 93

Citric acid (Genoa) eks. 100 Citric acid (Genoa) eks. 100 Citrenella, oil (Galle) dms. 50 Cloves (Colembo) es. 10 Coconut oil (Galle) eks. 268, (Cochin) pps. 479, hds. 193, es. 2,279

Cod-liver oil (Christiania) brls. 35, (Rotterdam) es. 100 Cream of tartar (Marseilles) eks. 13

Cubebs (Amsterdam) bos. 29 Cumin-seed (Morocco) 61 Dragon's-blood (Singapore) es.

Drugs, undescribed (Boulogne)

Drugs, undescribed (Boulogne) cs. 53, (Baltimere) bxs. 60, (Dieppe) pkgs. 9!
Ergot (Oporto) bys. 12
Essential oils (Messina) nkgs. 583, $\frac{1}{2}$ cs. 101, cs. 63, $\frac{1}{4}$ cs. 232, (N. York) cs. 85
Eucalyptus oil (Melbourne) d9
Fenugreek-seed (Morocco) 430
Formaldehyde (N. York) brls. 117

Ginger (Calient and Cochin) bgs. 800, cs. 230 Glucose (N. York) 369 Glycothymoline (N. York) es.

672 Gum eopal (Hong-Kong) 100, (Singapore) 77, (Rotterdam)

Gums, undescribed (Retterdam) bgs. 60, (Bordeaux) (Morocco) 18

Argol (Lisbon) eks. 30, (Messina) 28 Boric acid (Leghorn) brls. 15 Chemical products (Barcelona) brls. 41 brls. 41
Cinnamon chips (Ceylon) 251
Cloves (Zanzibar) bls. 616
Coconut oil (Colombo) pkgs. 392, (Sydney) cks. 465
Cod-liver oil (Bergeu) brls. 50
Earth-nuts (India) bgs. 21,524, (Rufisque) tons 832

400
Lycopodium (Christiania) cs. 10
Mastich (Patras) cs. 5
Menthol (Japan) cs. 95
Mercury (Leghorn) bott. 600
Milk-sngar (Amsterdam) cs. 53
Mineral white (Bordeaux) pkgs.

826
Mint oil (Japan) cs. 175
Nut oil (Bordcaux) brls, 100
Nux vomica (Cochin) bgs. 160,
(Mangalore) bgs. 268
Olive oil (Leghorn) pkgs. 16,
(Bari) pps. 7, brls. 16,
(Malaga) brls. 1,296, (Seville)

pkgs. 157 Opium ((Bombay)

Opnim (Bombay) cs. 8, (Colombo) cs. 3 Oxabe acid (Fredrikstad) eks. 15, (N. York) brls. 23 Palma-rose oil (Bombay) pots

14
Papain (Colombo) es. 18
Paris green (N. York) brls. 64
Perfumery (Bculogne) es. 69,
(Rotterdam) 10, (Dieppe) 19
Petrolatum (N. York) brls. 115
Pimento (Bordeaux) 35
Potash caustic (Havre) dms.

Potash iodide (Japan) es. 10 Potash oxalate (Fredrikstad) kgs. 15

Potash prussiate (Rocen) eks. 8 Quince-seed (Cape) bls. 2 Quinine (Amsterdam) cs. 6 Quinine hydrochlor. (Amster-

Qainine hydroculor. (Amsterdam) es. 20 Rape-seed oil (Japan) es. 2,000 Roots, barks, herbs, etc. (N. York) pkgs. 267, (Marseilles) bgs. 35 bgs. 35 Salacetor

(Norway) kgs. 20, Salaceto brls. 40
Saltpetre (Calcutta) bgs. 1,700
Moroeco) 215 Sandarach (Moroeco) 215 Senna (Bombay) bls.

(Tuticorin) bls. 763 Sodium hypo. (N. York) kgs.

Sodium metal (Fredrikstad) cs. sulphide (N. York) Sodium

bris. 185 Soyn-bean oil (Japan) es. 3,500, bris. 1,232. (Dairen) es. 50,600

Sulphur (Girgenti) tons 1,000 Tannic acid (Pertland, M.)

Sulphur (Girgenti) tons 1,000
Tannie acid (Portland, M.)
brls. 20
Tartar (Naples) eks. 40, (Alicante) pkgs. 434
Tartar emetic (Rouen) eks. 8
Tartarie acid (Bari) brls. 434
Turpentine (Bordeaux) eks. 650, (U.S.A.) eks. 5,248, galls. 254,221, (Spain) brls. 1,461, dms. 120
Vanillin (New York) pkgs. 22
Vermilion (Rotterdam) eks. 25
Wax, bees' (Calcutta) es. 12, (Oporto) bgs. 14, (China) es. 25, (Beira) pkgs. 112, (Moroeco) pkgs. 188
Wax, veg. (Janan) 25
Zine oxide (N. York) brls. 2,270, (Rotterdam) 40
erpool.

Essential oils (Messina) pkgs. Cod-liver oil (Lisbon) brls. 11,

cod-liver oil (Lisbon) bris, 11, (Oporto) eks. 9 Cream of tartar (Oporto) eks. 10, (Tarragona) eks. 7 Ginger (W.C. Africa) bgs. 400 Glycerin (Bucnos Ayres) dms.

Gum copal (Singapore) cs. 10 Gum damar (Singapore) bkts.

Petrolatu n (Baltimore) brls. Gums undescribed (Port Sudan) bgs. 586 Indigo (Madras) 30 Liquoriee-juice (Naples) pkgs. 10.981 Magnesite (Madras) tons 725, Sulphur Magnesite (Madras) tons 725, bgs. 995
Milk-sugar (Leghorn) es. 6
Olive oil (Leghorn) pkgs. 111, (Spain) es. 10
Palm-kernels (W.C. Africa) tons 112, bgs. 35,128
Palm-oil (W.C. Africa) eks. 2 637

Roots (Leghorn) bgs. 13 nitrate (Talcahuano) bgs. ulphur (Catania) bgs. 1,970, kgs. 53, pkgs. 56? Ags. 55, pags. 667
Tartaric acid (Genoa) cks. 86,
(Naples) brls. 8
Wax, bees' (Mombasa) bgs. 13
Wax, undescribed (Lisbon)
pkgs. 189, (Rotterdam) cs. 24 Winelees (Messina) bgs. 180

2,037 | Wincless (Messina) bgs, 180

To Bristol.—Cottonseed (Alexandria) tons 2,520; mineral white
(Bordeaux) 100; soya beans (Vladivostock) tons 2,500. To Folkestone.—Chemical prod. (Dicppe) pkgs, 10; perfumery (Boulogne)
pkgs, 125, (Calais) 4, To Goole.—Dye-stuffs (Boulogne) eks. 52;
saceharia (Holland) eks. 9, To Hull.—Castor-seed (Bombay)
bgs, 27,615; formic acid (Rotterdam) eks. 19; glucose (N. York)
240; linseed (Bombay) bgs, 17,475; lycopodium (Gothenburg) cs. 8;
magnesite (Rotterdam) bgs, 125; potash carbonate (Christiania)
cks. 29; potash salts (Gothenburg) cs. 9, (N. York) dms, 152;
soya-beans (Vladivostock) bgs, 215,918; zinc oxide (New York)
brls, 600. To Preston.—Calcium carbide (Drammen) dms, 1,000. To
Southampton.—Cottonseed (Alexandria) tons 2,055; drugs (Honfleur) es. 11; herbs (St. Malo) pkgs, 37. Southumpton.—Cottonseed (Alexandria fleur) es. 11; herbs (St. Malo) pkgs. 37

Opium Sales by Brokers.

The question as to whether Mineing Lane brokers are exempt from the conditions of Section 17 of the Pharmacy exempt from the conditions of Section 11 of the Pharmacy Act, 1868, as regards the labelling of opium, is being raised at the Mansion House Police Court on Friday, April 23. The ease will probably raise the whole question as to the sale by importers and brokers to wholesale dealers of scheduled articles.

Port of London Rates.

Notice is given by the Port of London Authority that on and after May 1 next an increase of from 20 to 25 per cent. will be made in the port rates on imported and exported goods. The Authority states that the additional revenue is required to meet the increase in the cost of materials and wages in connection with the extensive works of port important which are next in processes. provement which are now in progress.

American Drug-market.

New York, March 31.

New York, March 31.

The drug-market has been active during the past month. There has been a distinct improvement in business, and the outlook is materially brighter. There has been an urgent demand for all kinds of imported and domestic chemicals, and the prices of these have been advancing steadily. The bromides have advanced 10e. per lb., and mercurial ointment 16c. per lb. Aspirin is searce, although the price has not been advanced.

ALOES.—Curação is easier at 12te. to 12te.

the price has not been advanced.

ALOES.—Curação is easier at 12½c. to 12½c.

BALSAM PERU is the strong feature. Prices are firmer on diminished stocks, and \$2.40 is now an inside figure. The tendency of prices seems to be upward.

BUCHU.—Short are easier, influenced by lack of demand

and cheaper offers to arrive. Prices have been reduced to

\$1.40 and \$1.45, according to quantity and holder.

CANADA-FIR BALSAM has been revised downward to \$6.35

and \$6.50.

CASCARA continues to meet with a moderate demand, and is firm at 8e, to 10e.

GOLDEN SEAL is easier owing to cheaper offers from the West, and prices have been reduced to \$4.75 and \$4.80,

according to quantity and holder.

IPECACUANHA.—Supplies have been increased, and prices have been reduced to \$1.80 and \$1.85.

MENTHOL is quiet and steady at the decline noted of \$2.90 and \$3.00.

Opium is easy. Previous quotations of \$7.50 in cases are repeated, but there is no demand worth recording.

Peppermint Oil (American) is firmer, influenced by an absence of offerings from the West. Prices have been

advanced to \$1.60 and \$1.65.

Chas. H. L. Huisking, drug and chemical broker, 5 Platt Street, New York City, in his weekly report dated April 8, states that "while considerable activity is still displayed throughout the whole market, the excitement is not as intense as it has been up to this time, and we are not as intense as it has been up to this time, and we are now probably approaching a period of reaction, which must necessarily follow the spectacular markets, and even now there is a disposition to unload some of the goods gathered in while the buying movement was on. That this reaction can be but temporary is almost a foregone conclusion, as there is no hope that it will be less difficult from now on to replenish stocks. After this period has spent itself we can probably look for renewed activity."



Memoranda for Correspondents.

Communications should be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Correspondents are requested to write each query on a separate piece of paper. Every endeavour is made to reply to queries without delay, but insertion of the replies in "the next issue" cannot be guaranteed, nor, as a rule, can they be sent by post.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed, even when the writers use a "nom de plume."

Complete and systematic indexes of the "C. & D." are presented with the last issues in June and December each year. Every subject dealt with week by week is included, and correspondents are advised to refer to these and the "C. & D. Diary" before asking the Editor for information, so as tosave time.

Oil of Eucalyptus Citriodora.

SIR,—It will probably interest some of your readers to know that there are fair quantities of oil of Eucalyptus citrodora in Brisbane awaiting shipment. The delay is owing to the employment of so many vessels as troopships and the hesitation of others to carry an odorous substance likely to contaminate other cargo. Some oil destined for Germany was shipped to London about the date of the commencement of the war. It is very unlikely that any more of Backhousia citriodora oil will be produced in Queensland owing to the destruction of the bush in which the tree naturally grows. months ago the plant used in distilling this oil was broken up and dispersed. I understand that small broken up and dispersed. I understand that small quantities of this oil are still procurable in London, and I recommend users to make early application for it. Yours faithfully,
R. C. Cowley.

Brisbane, March 5.

Business in Paris.

Sir,—A stay here of several weeks has enabled me to study the state of trade in the French capital at first hand. The revival of business since I was here last autumn is quite remarkable. The conditions governing the exercise of our business here apply to most firms. The difficulties we are working under can be gauged by the fact that all the members of our French staff of military age are serving with the Colours. What this means to the trade of the country can be better understood at home, where the shortage of labour is so much felt, when it is remembered that the line of front held by the French army is 1,095 kilometres long, while that held by the English Army is $57\frac{1}{2}$ kilometres only in length. estimated here that, after deducting casualties, there are four million Frenchmen under arms. The new Army we are putting into the field will reduce the disparity in numbers no doubt; but these figures enable us to understand to some extent what the war means to the French The moratorium still exists here. We had a taste of it at home. We therefore know what a crippling effect it has on business. It is gratifying to see how well commerce has rallied here, despite many drawbacks, some of which I have alluded to. The spirit animating all Frenchmen is one of confident courage. They know they hold the enemy, and can wear him out. But they are looking to our great new Army to help them to crush him, and exact from him the price of the wrong he has inflicted upon the Allied nations.

Yours faithfully, ERNEST CRESSWELL

175 Rue du Temple, Paris, April 17.

Ceylon Papain.

Sir,-It is not so very long ago that I wrote to you on the subject of the various and dangerous forms of

adulteration that Ceylon papaw-milk was subjected to, and endeavoured to impress on the dealers in this product the danger of purchasing so-called "papain" from any and every source that offered this product for sale instead of going to the chief and reliable source of the preparation. At the same time I pointed out the risk the product ran of losing its valuable therapeutic reputation by dealing in cheap, and therefore unreliable, preparations. If proof positive was needed in support of my contention, I have pleasure in publishing, for the information of those interested in preserving the good name of this product, the following extract from a letter of advice I received by last mail from one of the largest American firms of the highest repute and standing that deal in this preparation. Writing under date February 2, 1915, they say

"You may perhaps recall correspondence with you concerning the product of *Carica Papaya* some ten years ago. At the time you sent us a specimen of the pure dry product, prepared under your direction. During this time we have prepared under your direction. During this time we have from time to time assayed commercial products described and sold as 'papain' or 'dry papain,' etc. Wo have recently seen literature on the subject of papaw from various climates and sources, and the method of its treatvarious climates and sources, and the method of its treatment. As for purselves, we can only confirm what you have long ago told us as to the adulterated character of the products sold. We are not now speaking of chemical analysis of the material, but simply from assays as to enzyme character, conducted under all the conditions which are said to be, or could be conceived to be, suitable for the protoclytic energy of the nanew." The exhibition of the proteolytic energy of the papaw.

It is very gratifying to have one's opinion corroborated by outside authorities of standing, and, as I said in a letter sent to-day to the "Ceylon Observer," I have only again to say what I have so repeatedly said before—that if the present selling-price of the dried papaw-milk is Rs. 5 to Rs. 6 per lb., and if Colombo firms and dealers buy at Rs. 5 per lb., then where does the profit come in? The answer is quite obvious.

Yours truly, H. HUYBERTSZ, L.R.C.P. Kandy, Ceylon. P.S.—Since writing this I have just seen the article on Papain in your Winter Issue of January 1915, and I note you have quoted my remarks that appeared in the "Journal of the Royal Society of Arts," and also those that were addressed some time before then to The CHEMIST AND DRUGGIST. The latter hold good up to date; if anything, time has only confirmed more strongly the opinion I formed some time back of the subject as a whole, which I am glad to say is now supported by an American firm of large repute.

H. H.

The Government Insurance Dispensing Grant.

Sir,—In my letter printed in your last issue, p. 54, I arged the importance of pharmacists looking well ahead at this moment, especially in the light of the hint dropped by Mr. Montagu in his address to the recent pharmaceutical deputation. That hint was contained in his ceutical deputation. statement that possibly a preferable manner of paying chemists' accounts would be devised and the discounting expedient circumvented. It is extremely necessary that panel chemists should bring their imaginations to bear, ere it is too late, upon the situation, and consider the several ways in which a new system of payment might be devised which did not include discounting.

Now, first, will the aggregate Drug Fund of the country be pooled? No objection to doing so could come from doctors as a whole, for only such comparatively few doctors as are now enjoying the "floating sixpence" would be likely to find the suggestion unpalatable. Similarly, only chemists in those few areas which receive payment of accounts in full would be likely to suffer from, and raise objections to, such a proposal. But personally I feel sure that in both cases a British sense of fair play, of the desirability of all sharing alike, would be amply sufficient to dissolve those objections, and we may, I confidently believe, assume that whatever the future holds, the pooling of the Drug Fund will be found therein. Going now to another point, it may well be that chemists will be offered the alternatives of accepting the present Tariff along with a discounting clause, or of adopting a more rigorous list of prices

with guaranteed prompt payments of twenty shillings in the pound. If these are the only alternatives the latter is far and away the more desirable. Now, there are some who hold, as I do, that if only doctors exercised a proper wisdom in prescribing, the present funds would amply suffice to pay in full the bills of chemists at present Tariff prices; and if this is so, the problem becomes how to provide doctors with adequate motives to economy. That brings me to a suggestion I made in these columns some time ago, and one I still hold despite much criticism-viz., to pay to the doctors the whole of the Medical Benefit Fund, they paying us for what they prescribe. Surely such a plan, apart from certain sentimental objections of light weight, would be unexceptionable to chemists, to the doctors themselves, to the friendly societies, to insured persons, to the State; in short, to everybody. In no other way can the suggestion, so often made, of "making chemists' bills a first charge on the Medical Benefit Fund " be carried out. Another suggestion is to add sixpence to the Drug-suspense Fund-i.e., to enlarge the "floating sixpence" to a "floating shilling," the extra sixpence coming directly from an shilling," the extra sixpence coming directly from an ad hoc Exchequer grant. But I take it that such would be only a temporary measure of relief, and that it would not be long before doctors climbed beyond the shilling as they have beyond the sixpence, and as for us, we should be in statu quo. There is another alternative it were well to keep in mind; I mean the possibility of putting out the Tariff to contract in some form, of course in each local area, but I understand that this was fully considered and unanimously rejected in principle before the present system was adopted. I fear that the time of the most logical and efficient system of all-that of State dispensaries—is not yet, though I should be exceedingly happy to be convinced of the contrary. How if, owing to conditions growing less and less congenial, there were a progressive defection from the panel on the part of chemists, and the State dispensary had to be introduced?... The future may hold even that.

I am, Sir, etc.,

Chester.

R. CECIL OWEN.

Subscribers' Symposium.

For interchange of opinion among "C. & D." readers, and brief notes on business and practical topics, especially new ideas.

"Horse-sense."

Gold Coast letter-writers have broken out in a new place. Gold Coast letter-writers have broken out in a new place. One of them recently ordered from a City house some "Brain-salt" and "Learner's Cure" to help him in his studies for an examination. The "Foot-rot Cure" has been returned, as if was not the thing wanted. It was catalogued "Learner's Foot-rot Composition," and the ardent student informs the City house: "I took it to be a medicine for Learners (students), but and not for horses, so if it will be good for a man's use write me same."

Leech-keeping.

"The difficulties experienced by the average chemist and druggist in the keeping of leeches are such that the following hints may be useful, gleaned as they are from practical experience and after repeated efforts to conduct a profit-able aquarium on a small scale. The leeches should on arrival be well washed in running water, then transferred to an earthenware jar containing a wisp of wood-shavings (such as are used in packing). This latter has proved to the writer the key to the situation, and the long-looked-for remedy for the high death-rate among his leeches. It performs the useful function of a scraper of the mucus secretions of the leech, and thus enables it to propel itself in the water free from that fœtid matter which is the source of the water tree from that testid matter which is the source of so much trouble. A daily wash in the hand and frequent renewal of the water and shavings in the jar will ensure a period of longevity seldom accomplished by the captive leech. Coarse muslin should form the covering of the jar, for it likewise acts as a ventilator and light-filter." for it likewise L, H, H, (75/37).

The Lost Apron.

In Scotland during the last ten years chemists and druggists and their assistants have undergone a complete transformation in their business dress. The familiar linen apron has been discarded for the jacket or lustre coat, and since the war enthusiasts in the latest pharmaceutical fashions

have donned khaki coats. The following lines are by $Thomas\ the\ Rhymer\ (E10/15)$:

In days of old an apron I
Held sway in ranks of Pharmacy.
My spotless white, of neatest cut,
Adorned both Governor and Knut.
At counter, desk, or in the lab.,
Mortar, press, or ointment-slab,
I was a never-failing part
Of all who practised Galen's art.
But now my use is superseded,
No more in Pharmacy I'm needed;
My long career's abruptly ended,
For reasons which are here appended.
The lustre-coat has me displaced,
I am dismissed, tho' not disgraced.
With tunic coats I have no quarrel,
Fate has decreed other apparel.

The Pharmacy Shebeen.

"The following fragment was discovered on the person of a Spring Poet who has since been interned for the duration of his Majesty's pleasure in a local asylum. He is understood to have lost his reason through a fear that the authorities were about to deprive him of his poetical licence. I may say that the authorities have my entire sympathy if such was their intention."—U. U. Gee (74/5).

(Tune, "Irish.")

Oh! Patsy dear, and did you hear
What Jawn McGovan thinks—
That soon the chemist's shop will be
The only place for drinks?

Och! the cheerful days when porter,
Whisky, beer, and gin are seen
Along with S.V.M. inside
The Pharmacy Shebeen.

Twill be fat times for the chemists then—
Of that there's not a doubt—
When the orders come from Guinness's
They'll all be getting "stout";
No longer on the ledges
Will the "Risk-all" goods be seen,
Every corner will be wanted
For the Pharmacy Shebeen,

Should a thirsty-throated Irishman Come in to get a drink,
If he asks a box of Beecham's pills
And tips you out a wink,
You'll know he's wanting porter,
For when Mr. Beecham talks,
He always says his pills are worth
"A Guinness for a box."

When a working man is suffering
From an all-prevailing thirst,
I suppose he'll have to call upon
His panel doctor first;
He'll get "Recipc, two pints of Bass"
Upon a paper green,
Faith! they'll need to form queues outside
The Pharmacy Shebeen,

Legal Queries.

The majority of difficulties in regard to trade law are explained in the legal section of "The Chemist and Druggist Diary," 1915, beginning on page 405.

A. C. (39/12).—There have been convictions under the Pharmacy Acts for the sale by unqualified persons of pills containing extract of colchicum, and fines have also been inflieted for the sale of such pills not labelled "Poison." The ground upon which these convictions have been obtained was that the pills are a preparation or admixture of a Part I. poison—namely, a poisonous vegetable alkaloid. Therefore, the pills are a Part II. poison, and, that being so, they may be supplied by post. The de minimis non curat lex question has not arisen so far as pills containing colchicum extract are concerned, and as the proportion of 2 oz. of acetic extract in 20 oz. of pill-mass can be demonstrated by analysis, you would be unwise in regarding such a mass as being outside the Schedule.

Juno (73/29).—Seeing that you took over your present business in December last, when making the return of your income you are only required to state thereon the nature

of the amount of your income up to the time of taking on the business and the net profit since. You have no concern with the profits made in the business by your predecessor. We presume you understand that the return for income-tax is made in respect to the year beginning April 5. 1915, and that in such a case as yours the assessor will estimate from your return of net profit the amount that he expects you to make during the year, averaging, however, your income during the past three years. The assessor, in estimating your probable profits for 1915-16, will no doubt take into consideration the returns made by your predecessor, and you will have an opportunity of discussing the matter with him.

Miscellaneous Inquiries.

W. C. (50/43).—Damp-wall Composition.—See C. & $D_{\cdot, \cdot}$ October 10, 1914, p. 62.

E. J. Q. (14/24),—(1) MYRRH-AND-BORAX DENTIFRICE: Myrrh 5j. 5ij. Borax ъij. Glycerin δį. Rectified spirit Water ... 5xv. Ξv. ... Bergamot oil ... 3]. Lemon oil 5SS. Rose oil 5i. Neroli oil ... mx. ... Rosemary oil ηιx.

Macerate fourteen days, filter bright, and make up to 22 oz. with eau de Cologne.

(2) Seton-dressings.—The following are used: (1) Ol. tereb. 1 part, ol. anchusæ 2 parts; (2) lin. ammoniæ.

J. F. K. (59/13).—(1) Dog MIXTURE:

Balsam of sulphur 1 oz.

Sassafras oil 1 dr.
Olive oil to make 20 oz.

Mix. One teaspoonful to be given morning and evening-This mixture is credited with alterative properties.

(2) Metol-quinol Developer:

Metol 3 grams , Quinol 5 grams Water 1,000 c.c. ... 1,000 c.c.

Solium sulphite 150 grams
Potassium carbonate 1 to 3 grams

For plates, mix with an equal quantity of water; for films, with two parts of water.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," April 15, 1865.

The First Poison Schedules.

(The following are quoted from Pharmacy Bill No. 2, drafted by the United Society of Chemists and Druggists.)

Schedule A .- Dangerous Drugs.

The following are dangerous Drugs to which Sec. 14 of this Aet relates:

Almonds, Essential Oil of
Antimony, Pharmacentical Preparations of
Arnica, and
Barium, and
Brominc, and
Cloceulus Indieus, and
Cresote
Croton Oil
Deadly Nightshade,
Foxglove, and
Grains of Paradise,
Helbebore, and
Hembane, and
Henbane, and
Ipecacuanha, and Pharmaceutical Preparations of
Lettnee,
and Preparations of
Lettnee,
Male Fern,
Meadow Safron, and
Mercury,
Mercury,
Opium, and

SCHEDULE C .- Active Poisons.

Iodine, and

The following are Active Poisons referred to in Section 18 of this Act:

Aconite, Pharmaceutical Preparations of Arsenic, and Arropine, "," Ergot of Rye, and Pharmaceutical Preparations of Strychnine, and "," Veratrine, ","

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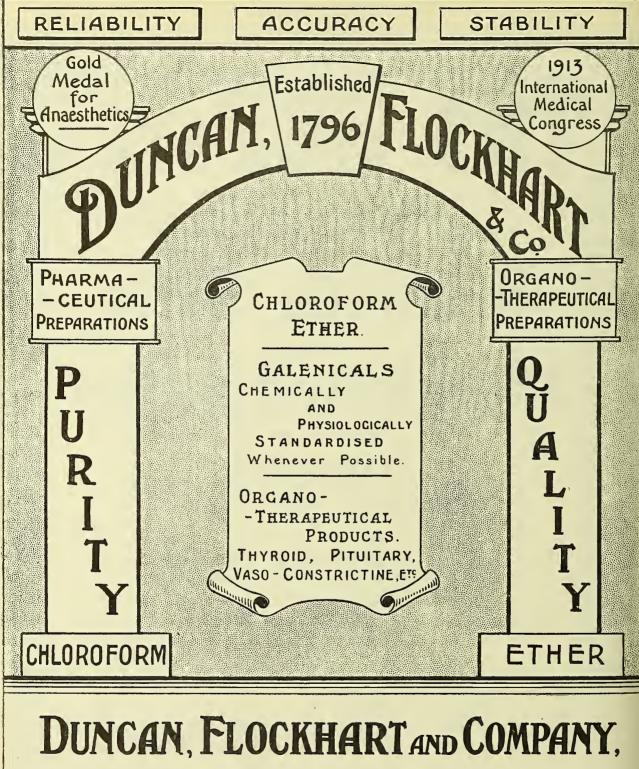
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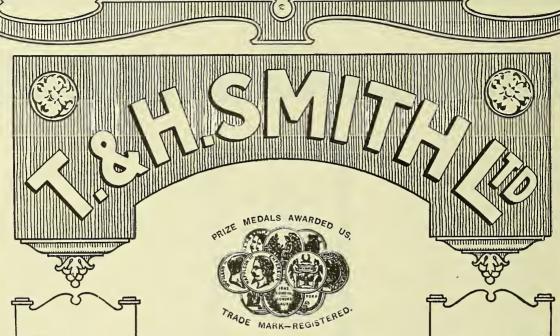
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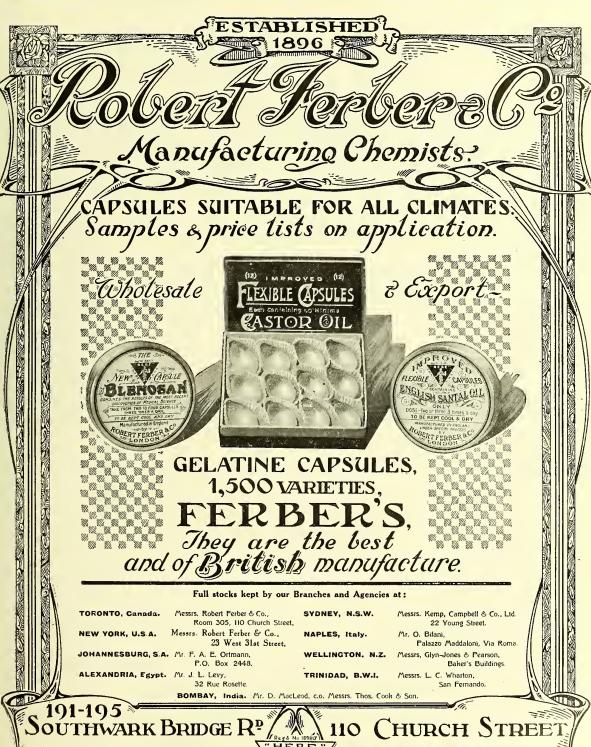
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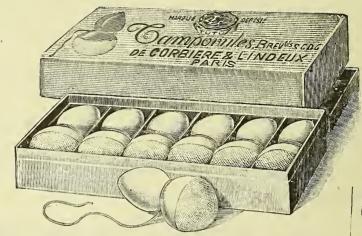
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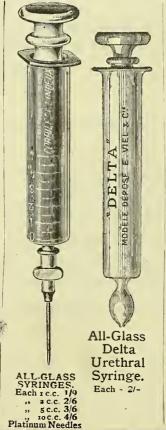
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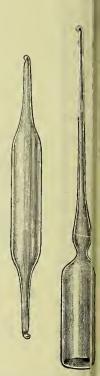
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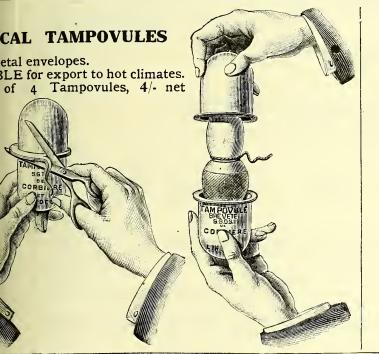
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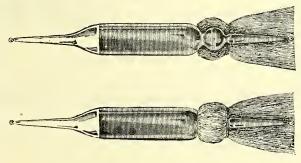
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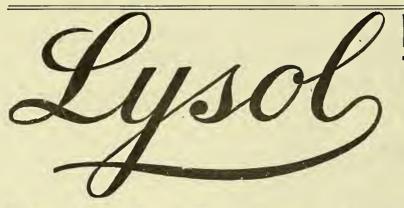
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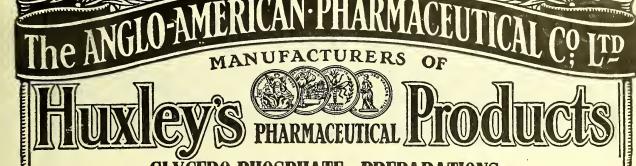
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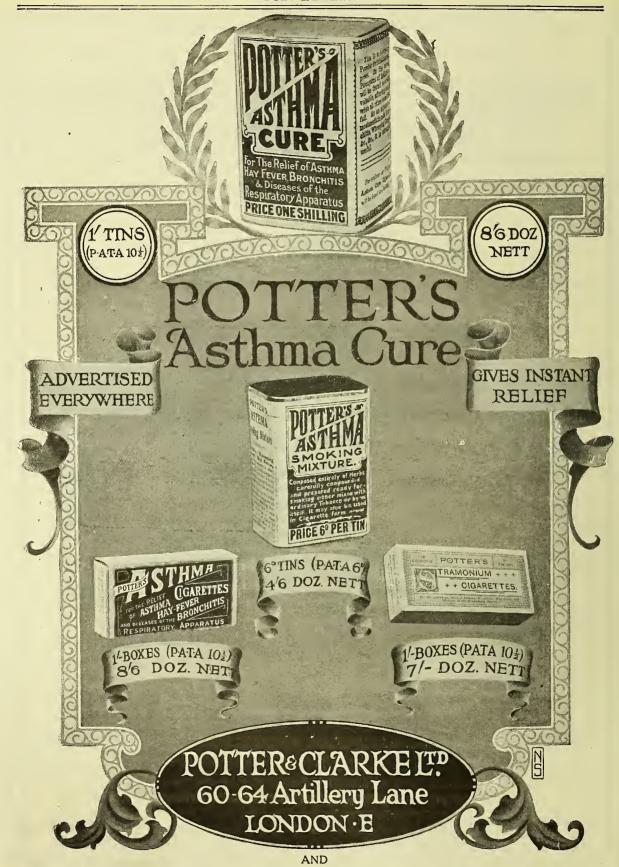
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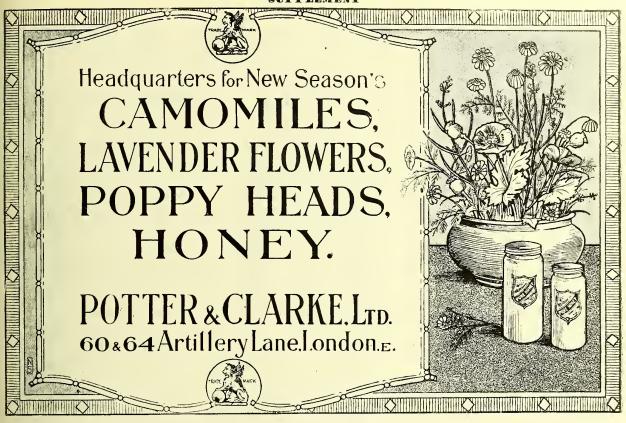
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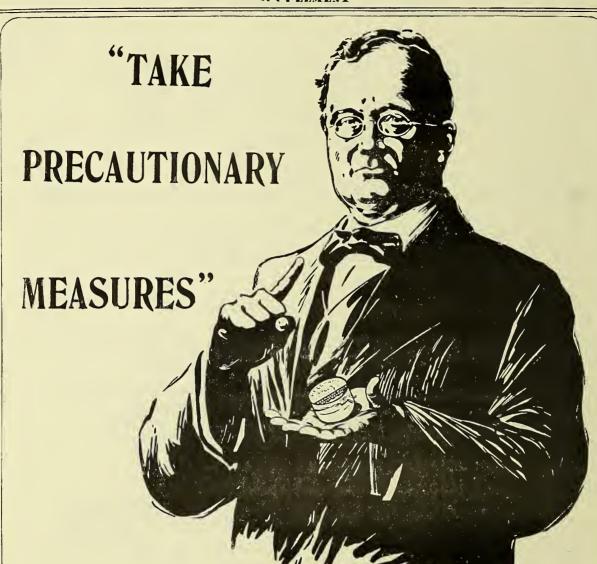
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*, Ferri Percblor. Fort., P.B., 7 lbs. @ 4d. lb.

*, Ferri Phosph. Co. p.s., 1-7, 7 lbs. @ 1/6 lb.

*, Hypopbosph. Co., p.s., B.P.C., 1 lb. @ 38.bh.

3/8 lb

3/8 lb.

10di Fort., B.P., 5 lbs. @ 6/- lb.

Morphinæ Acet, or Hydrochlor., P.B., 6
lbs. @ 3/4 lb.

Opil Sed., 5 lbs. @ 4/6 lb.

Plumbi Subacet., P.B., 7 lbs. @ 3½d. lb.

Proni Virg p.c. - .5 lb @ 2 c lb.

Rheados pro Syr., 1 to 7, 5 lbs. @ 1/11 lb.

Rhei, p.s. 1-7, 6 lbs. @ 2/2 lb.

Santali Co, 1 lb. @ 4/- lb.

Sennæ Dulc., 6 lbs. @ 1/5 lb.

Sennæ pro Syr., 1-7, 6 lbs. @ 2/- lb.

Strychninæ Hyd., P.B., 6 lbs. @ 1/6 lb.

Tolut. pro Syr., 1-7, 6 lbs. @ 1/8 lb.

Trint.rini, P.B., 1 lb. @ 6/1 lb.

Mag. Sulph., fine druggists', B.P., 1 cwt. @ 12/6

*Mist, Sennæ Comp., B.P., 20 lbs. @ 6½d. lb.; 6 lbs. @ 7½d. lb.

Morphinæ Acet. Hydrochlor, or Sulph., Pulv. B.P., 25 oz. @ 13/10 oz.; 16 oz. @ 1 /l oz.; 8 oz. @ 1 /2 oz.; 1 oz. @ 14/9 oz.; Pur. Præcip, Bimeconate or Tart. 1 oz. @ 1:/3 oz.

*Minimum quantity at these prices; Home Trade, 3 Winchester Quarts assorted;

1. Caryopb. Ang., B.P., 9 lbs. @ 4/8 lb.; 41 lbs. @ 4/10 lb.

Ol. Menth. Pip. English, 5 lbs. @ 35/6 lb.; 1 lb. @ 36/6 lb.; American, 20 lb. @ 8/3 lb; 44 lbs @ 8/11 lb; 1 lb. @ 9/6 lb

Ol. Wintergreen, Artificial, 5 lbs. @ 9/- lb.; 1 lb. @ 9/5 lb.

Oxymel Scillæ, B.P., 5 cwt. @ 34/6 cwt.; 1 cwt. @ 38/6 cwt.; *7 lbs. @ 7d. lb.

Pulv. Cretæ Arom. P.B., 14 lbs. @ 7d. lb.; c. Opio, B.P., 7 lbs. @ 1/9 lb.
Pulv. Glycyrrh. Co. B.P. (Green), English Ground, 56 lbs. @ 52/- cwt.
Pulv. Ipecac. Comp. P.B., 1 lb. @ 5 3 lb.
,, Jalap Comp. P.B., 1 lb. @ 1/9 lb.
,, Rbei Comp. P.B., 1 lb. @ 1/2 lb.

Spt. Æther Nit. P.B., 4½ lbs. @[3/10 lb.; 1 lb. @ 4,1 lb.

@ 4,1 lb.

"Ammon. Aromat., P.B., 5 lbs. @ 3/- lb.

"Chloroform, P.B., 5 lbs. @ 3/8 lb.

"Syr. Aurant. P.B., 7 lbs. @ 10\fmathfrak{1}{2} lb.

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"Scille, P.B., 7 lbs. @ 9\fmathfrak{1}{2} lb.

"Scille, P.B., 7 lbs. @ 9\fmathfrak{1}{2} lb.

"Tolut., P.B., 7 lbs. @ 8\fmathfrak{1}{2} d. lb.

Tinct. Aurantii Recens., B.P., 5 lbs. @ 3/6 lb.; bond, 8½d. Aquos, 10d. lb.

*Tinct. Belladon., B.P., 5 lbs. @ 3/5 lb; bond, £½d. Aquos, 1/- lb.

*Tinct. Benzoini Comp., P.B., 5 lbs. @ 3/7 lb.; bond, 10d.

E. Aquos, 1/- lb.

*Tinct. Benzoini Comp., P.B., 5 lbs. @ 3/7 lb.; bond, 10d.

*Tinct. Campb. Comp., P.B., 5 lbs. @ 2/8 lb.; bond 1cd. Aquos, 1/1 lb.

*Tinct. Cartharidis, P.B., 5 lbs. @ 4/- lb.; bond, 8. lb.

*Tinct. Cardsci, B.P., 5 lbs. @ 2/10 lb.; bond, 6d. lb. Aquos, 10d. lb.

*Tinct. Card. Comp., P.B., 5 lbs. @ 2/2 lb.; bond, 2d. lb. Aquos, 1/- lb.

*Tinct. Cincbon. Comp., B.P., 5 lbs. @ 3/2 lb.; bond, 1/0} lb. Aquos, 1/2 lb.

*Tinct. Cincbon. Comp., B.P., 5 lbs. @ 3/4 lb.; bond, 1/0} lb. Aquos, 1/2 lb.

*Tinct. Digitalis, B.P., 5 lbs. @ 3/4 lb.; bond, 0} lb. Aquos, 1/2 lb.

*Tinct. Digitalis, B.P., 5 lbs. @ 3/4 lb.; bond, 6\frac{1}{2}d. lb. Aquos, 1/2 lb.

*Tinct. Hyoscyami, B.P., 5 lbs. @ 3/2 lb.; bond, 7\frac{1}{2}d. lb. Aquos, 1/3 lb.

*Tinct. loi. B.P., 5 lbs. @ 4/10 lb.; bond, 1/6\frac{1}{2}d. lb. Aquos, 1/2 lb.

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*Tinct. Valerianæ, 5 lbs. @ 2/9 lb.; bond, 8d.
lb. Aquos, 1/- lb.

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Fig. 1194

BRITISH MAKE.



Fig. 1354.

Fig. 1194.—The "EMPIRE," red I	India-rubber Air Cu	shion-				
	14 15		17	18 !	19 -	20 in.
	5 0 5 6	6 0	6 6	7 6 18	8 6	9 6
Fig. 1354.—Air Cushion, sateen covere	d, reedcd	Sizes Each	$\begin{array}{ccc} 14 \times 10 \\ 3 & 3 \end{array}$	15×12 3 9		8×14 in. 4 6
Special Line - Khaki-covered Pil	llow 17×12 in in	khaki case with	clasp "		each	3 9

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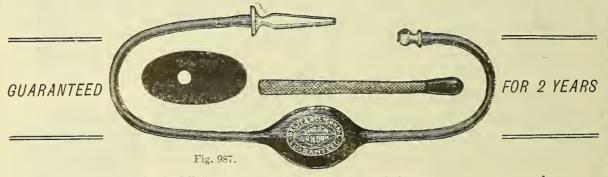


Fig. 987.—The "B.E.M." (Best English Make), with bone rectal pipe, etc.,	S.	d.
complete in superior card box, per doz.	17	0
,, in leatherette dome-top case ,,		0
,, super quality ,, ,,	24	
,, extra large and stout, the finest article made ,,	32	
Fig. 988.—The "EMPIRE," complete in eard box	18	O

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Hospital pattern		per doz.	10 0	Hospital pattern		per doz.	12 0
" lens front		77	13 0	lens front		7.	16 0
60-seconds, plain lens front	•••	7.0	11 0 15 0	60-seconds, plain lens front		,.	15 0 20 0
30-seconds, plain		,-	13 0	30-seconds, plain	•••	**	18 0
lens front		**	17 0	lens front		**	27 0
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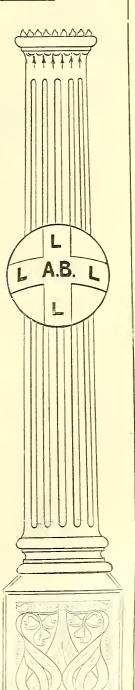
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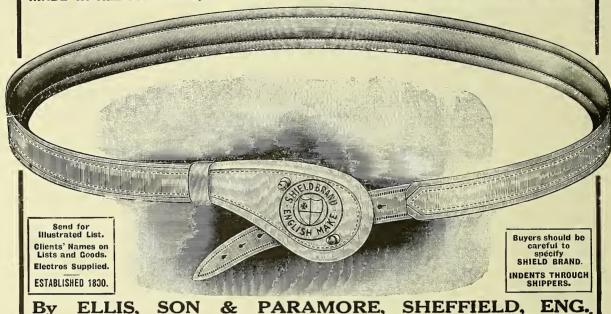
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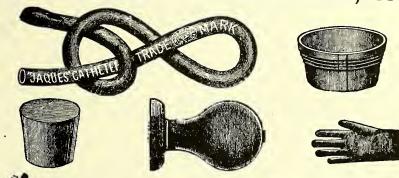
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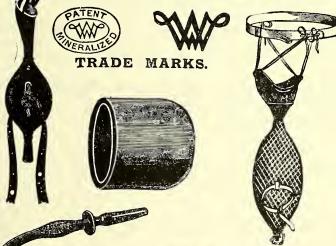
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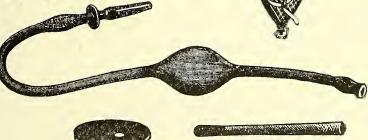
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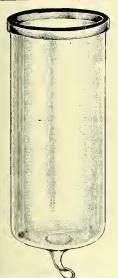
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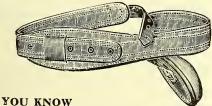
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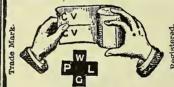
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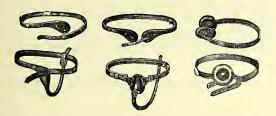
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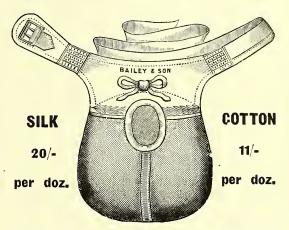
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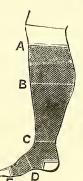
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Fig. 2.

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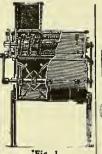


Fig. 1. Sizes for Hand Use.



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Fig. 4.

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Fig. 5.
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Fig. 6.

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Fig. 7.
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Fig. 8.

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Fig. 9



Fig. 10



Fig. 11.



Fig. 12.

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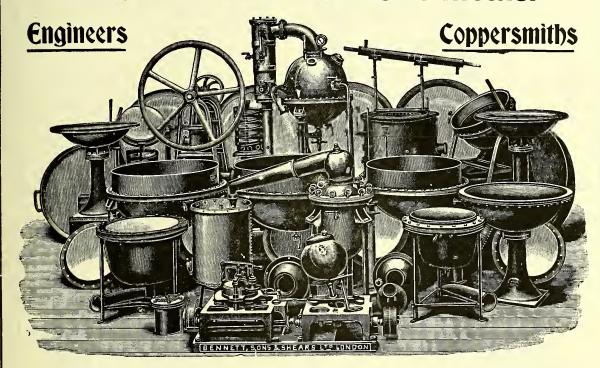
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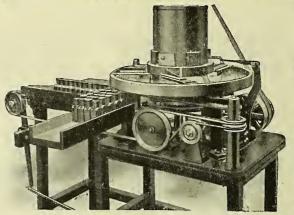
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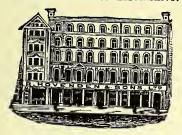
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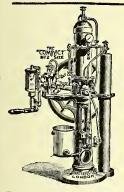
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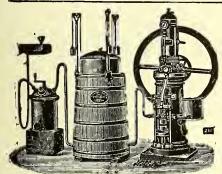
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Occupies little space.

AUTOMATIC CARBONATION.

To those who can spare space in which to generate their own gas, we offer the "Niagara" machines advertised below.



THE

Ready for immediate use. Requires no fixing.

"NIAGARA" Soda-water Machine

(Continuous Action).

This machine is superseding all other types for the manufacture of FIRST-CLASS Aerated Waters, and is in use in most of the leading manufactories throughout the world,

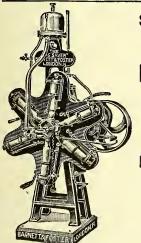
PRICES, COMPLETE, from £30,

FITTED FOR HAND AND POWER

Particulars of Larger Sizes on application.

NOTE.—These machines are sent out by us complete and ready for work. We include all necessary connecting pipes without extra charge.

No "extras" to pay for after buying our machines.



THE "GAS-SAVER,"

Price £60

STUDY QUALITY—AS CHEMISTS MUST—

By Bottling on our Latest Types of Filling Machines. We Guarantee the

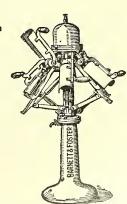
Highest Quality Soda-water at 60-lb. Pressure!

thereby Saving Gas, avoiding Bottlebreakage and improving quality of Products.————The secret:

BACK PRESSURE—PROPERLY APPLIED.

Particulars of the "GAS-SAVER," for filling Codd's and Niagara Bottles; The "ROUNDABOUT," for filling Corked, Crowned and Screw Bottles sent on application.

SAVE MONEY.



THE "ROUNDABOUT," in 6 sizes, prices from £25

CATALOGUE of all our Manufactures, including Syphon-filling Machines, Syphons, all classes of Bottles, Modern Bottle-washing Appliances, Ice and Refrigerating Plant, Essences, Flavourings, and Drugs, and every requirement of the trade sent FREE on

NIAGARA WORKS, 26' EAGLE WHARF ROAD, LONDON, N.,

AND AT BOLTON, LANCS.

IDRIS Table Waters

IN

Chinaways

AS SUPPLIED TO H.M. THE KING.



PREPARED WITH

Distilled Water

Fixed Minimum Retail Prices—allowing a good Profit to Chemists.

Full Particulars of Agency Terms on application.

IDRIS & CO., Ltd. (Dept.) Camden Town, LONDON, N.W.

BRANCHES: Liverpool, Southampton, Canterbury, Bournemouth, Margate, Folkestone, Southend.

To Aerated Water Manufacturers.

DELICIOUS AERATED BEVERAGES

ARE MADE FROM

HAY'S ESSENCES

Cream Soda Essence,

Cream Raspberry Essence (MADE FROM),

Cream Strawberry Essence (MADE FROM FRUIT)

Orange Squash Essence.

Peach Ripe Essence,

Claret and Lemon Essence,

Cherry Cider Essence,

Lemon Squash Essence (BRIGHT or CLOUDY)

Lime Juice and Soda Essence,

Orange Champagne Essence,

Kola Champagne Essence, and

"Pale Dry" Ginger Ale Essence.

SAMPLES AND FULL DIRECTIONS FOR USE FREE ON APPLICATION.
ATTRACTIVE LABELS AND SHOWCARDS SUPPLIED.

Orders for Two Gallons and upwards of Essence may be shipped under bond.

Indentors when ordering should specify HAY'S manufacture.

WILLIAM HAY, Ltd. ESSENCE HULL & LONDON.

Head Office and Laboratories-HULL, Eng.

London Depot-3 YORK ST., WALWORTH, S.E.

Telegraphic Address

"Bushworth London."
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London, No. 2753 Hop. Hull. No. 488.

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A 6º BOTTLE MAKES & GALLONS.

NEWBALL& MASON NOTTUNGHAM.

GLASSES
DRUNK
DAILY
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ALL
OVER
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MILLIONS

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MODERN PHARMACEUTICAL PRODUCTS

SACCHARIN

Highest possible strength 550 times sweeter than pure cane sugar.

500 Soluble

450 Crystals

330 & 300

All strengths supplied duty paid or in bond for export.

NOVOCAIN

The Non-Irritant Local Anæsthetic.

GOLD MEDAL at International Medical Congress, London, 1913.

NOVOCAIN

DOES' NOT CONTAIN COCAINE.

Supplied to
IIIS MAJESTY'S WAR OFFICE and
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Price Lists and Literature on application.

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TRIVALIN

A NEW HARMLESS NON-TOXIC SUBSTITUTE FOR MORPHIA.

Specially recommended in Painful Dressings, Inoperable Cancer, Gall-stone, Sciatica, Neuralgia, etc.

In Ampuls (1cc.) for Hypodermic Injections.

In Coated Tablets for Internal Administration.

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FORMERLY KNOWN AS

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THE NEW SURGICAL HEMOSTATIC Vide "The Lancet," July 18th, 1914.

Powerful Styptic hastening coagulation and clot formation. Prepared from blood residues, free from inorganic salts. Non-irritant, non-corrosive and nontoxic. Renders tamponage and ligature of small vessels unnecessary. Facilitates healing of wounds by first intention.

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PHARMACEUTICAL DEPT ..

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BRILLIANT PLATE.

"ALBATUM OR WHITE ROUGE"

GIVES A UNIQUE POLISH TO ALL SILVER AND ELECTROPLATED GOODS.
In 6d. and 1/- Boxes, and Tins, 2/-

BRADLEY AND BOURDAS,

6 PONT STREET, S.W.

ALL CHEMISTS SHOULD STOCK

ABDINE

THE GOLD MEDAL FRUIT DRINK.

Quick Seller. Big Profits. Quarter of a Century's Reputation.

'ABDINE' is the most popular Health Drink. Superior to all Mineral
Waters. Sold in 1d. Packets, and Boxes of 13 Packets at 1/
Order through your Wholesate Drug House.

D. M'GLASHAN, M.P.S., 12 West End Place, EDINBURCH,
Wholesale Prices on Application.

SAPONINE

(SOLUBLE),

MANUFACTURED BY

C. W. FIELD, LTD.,

Cambrian Mills, LIVERPOOL.

Special Terms to Wholesalers and large Consumera

"Stretton"

The English

Natural

Table Water

The Purest in the World.

Copy of Analysis sent on application.

The Stretton Hills Mineral Water Co.
Church Stretton,
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London Depot: RICHARD DAVIS, 20 Maddox Street, W. Manchester : JEWSBURY & BROWN, Ardwick Green,

Prompt Sales Quick Turnover Increasing Demand Protected Price

You stock "Wincarnis"—our advertising sells it for you. There is an enormous and ever-increasing demand for "Wincarnis," because it is a good article backed up by a powerful advertising campaign. Don't risk losing sales through being out of stock. Glance at your stock now.

IMPORTANT NOTE TO CHEMISTS WITHOUT LICENSES.—It has been established by law that Registered Chemists may sell "Wincarnis with Quinine" without a license.

COLEMAN & CO., Ltd., Wincarnis Works, NORWICH.



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PURE LIQUORICE JUICE.

- THE LANCET says:

The above brand has long been known to be of standard purity. We found the specimen to be completely soluble in water, and entirely free from impurities of any kind. It is, therefore, well adapted for the pharmaceutical purposes for which it is so useful, while as a popular demulcent it is both safe and reliable."

THE
CHEMIST
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"The most esteemed of all."

To be obtained of all

Ghemists in the

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British Golonies.

RECOMMENDED ALSO BY

"THE BRITISH MEDICAL JOURNAL,"

"HEALTH,"

"FOOD AND SANITATION," &c.

ASK FOR SHOWCARDS AND HANDBILLS.

THE CHEMISTS' BRAND

On P.A.T.A. at Full Price.

Regularly Advertised.

Good Profit.

The Brandsthat are popular and that Sell are-

"Toinoco Silky Fibre"-Double "A" 50 1/3

"Toinoco Silky Fibre" - 50 1/-

"Toinoco Papier Crepon" -- 50 7½d.

For your own sake avoid feeble and pitiable imitations.

Order through your Sundries House or from the Bole Proprietors TOINOCO HANDKERCHIEF CO., Ltd., 83 Clerkenwell Road, LONDON, E.C.

A. MILLAR & CO., LTD., DUBLIN

VINUM AURANTII, B.P.

Prepared in strict accordance with the Formula of the British Pharmacopæia. London Agent: JAMES STIRTON, 43 GREAT TOWER STREET, E.C.

(Wholesale only,

WHOLESALE TRADE ONLY.

Established 1900.

DR. B. W. GATHERGOOD'S EXOR.

Terrington St. John, WISBECH -

For GREEN EXTRACTS and DRIED HERBS of BELLADONNA, HENBANE, &c.

Do You Sell Sister Lauras Food?



The question is often asked nowadays. The Chemist who does not stock Sister Lauras Food is missing a good line.

Sister Lauras Food is achieving great success as a preparation for weakly babes and for invalids and the aged.

It makes milk digestible and is invaluable in cases of malnutrition.

It is a thoroughly reliable line and one that brings a handsome return.

Samples and advertising matter free on application,

SISTER LAURAS INFANT FOOD CO., Ltd., 156 Vincent Street,

PRICES PROTECTED.

Food for Bables, Prepared Barley, Brunak, Power, N-F. Cocoa, Biscuits, Soup, Nutbutter (Walnut Brand), Wholemeal, &c.

We issue a list of WHOLESALE HOUSES who keep above in stock; if for any reason you have difficulty in obtaining supplies, please send postcard direct to us, and a list will be sent to you by return. See trade mark on all our goods: "T. R. ALLINSON." None Genuine Without,

NATURAL FOOD COMPANY, LIMITED, 305 Cambridge Rd., Bethnal Green, LONDON, E.

Handbills, Booklets, Showcards, &c., Free.

N.B.—Our goods are to be sold only at prices stated upon the Price List we issue to the trade.

Expurgo Anti-Diabetes

The only reliable and thoroughly satisfactory Remedy for Diabetes-Mellitus which has a record of complete cures.

REPORT FROM A PROMINENT PHYSICIAN.

I am satisfied your preparation has cured several of my patients. Expurgo Anti-Diabetes is particularly effective in combating and neutralising the diabetic poisons and in completely eliminating the sugar excretion characteristic of this disease.

The Medical Faculty is also recommended to try Expurgo Lapis—a particularly valuable preparation in the treatment of Call Stones, Kidney and Bladder Stones and Cravel.

Expurgo Anti-Diabetes, per bottle 8/-, less 25% Expurgo Lapis - per bottle 6/-, less 25%

Carriage paid on orders of 1 dozen.

THE EXPURCO MANUFACTURING CO.,

815 North Clark Street, CHICAGO, ILL., U.S.A.

Distributing Agents: Rocke, Tompsitt & Co., 4 Redcross Street, London, E.C.

YOU SHOULD STOCK

FOR INFANTS, INVALIDS, AND THE

MERSEL'S FOOD is a preparation of pure malted wheat. It is an ideal food for infants, invalids and the aged, being easily digested and retained by the weakest stomachs. Albert E. Bell, the well-known analyst, says: "It is a complete food of high nutritive value." Put up in 1/- tins only.

KNO-SKA OINTE

FOR ECZEMA, HÆMORRHOIDS, ETC.

KNO-SKA is an antiseptic and emollient ointment of proved efficacy. It is indicated in eczema, hæmorrhoids, boils and skin troubles generally. The remarkable success which attends the use of KNO-SKA is making it increasingly popular all over the country. Put up in collapsible tules, in two sizes only, at $1/1\frac{1}{2}$ and 2/9.

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N.B.—Mother Siegel's Syrup in TABLET FORM is a line which is increasing in popularity DAILY.

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Wholesale and Export Drug Merchants, - Manufacturing Chemists

HULL

Invite the Trade to take up the following valuable P.A.T.A. Protected Lines, bearing a very large Protected Retail Profit, which sell freely and are well known and valued by the Public in many parts of the country.

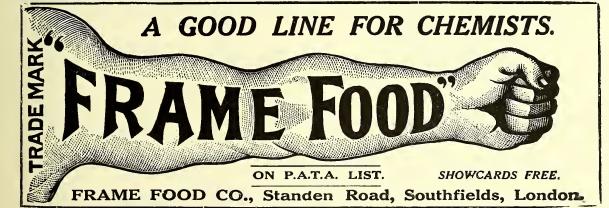
Protected Dozen Retail Price 3 6 *LOSALL'S SALT (well advertised), tins 6d. 7/-" bottles in a 1/6 10/6 * Losali's Sait selis so weil, surely it must pay Pharmacists to stock such a big profit-bearing protected line.

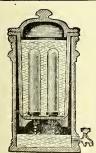
LOSALL'S COMPOUND SULPHUR SOAP.

A valuable emollient medicated skin 1/soap.especially suitable for use in Eczema 1/-

Chemists requiring effective advertising matter for Losall's Salt, &c., will, on application direct to Lofthouse & Saltmer, receive a liberal supply of Dummies, Showcards, Window Slips, Price Tickets, &c., Carriage Paid, whether or no they have an account open with the Firm.

SPECIAL TERMS ARE OFFERED FOR WHOLE OR PART WINDOW DISPLAYS.





CHEAVIN'S NEW "SALUDOR" FILTERS.

GERM-PROOF. PASTEUR SYSTEM.

British Manufacture throughout.

BETTER & CHEAPER

than the Continental makes.

Send for new Catalogue, now ready.

Sole Manufacturers-

The Fulham Pottery and Cheavin Filter Co., Ltd. **FULHAM** LONDON, S.W.

ERNEST JACKSON & CO.

Manufacturing Chemists.

(MEDICATED LOZENGES, PASTILLES, JUJUBES, Specialists in COMPRESSED TABLETS, CAPSULES, PERLES, CACHOUS, BOILED GOODS, SALINES, &c. &c.

> IMPORTERS of LIQUORICE JUICE THE ORIGINAL cushion = shaped LIQUORICE & MENTHOL PELLETS.

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By Royal Warrant

To H.M. King George V. To H.M.

Queen Alexandra.



HOLDERS OF ROYAL WARRANTS DURING THREE SUCCESSIVE REIGNS.



Jeyes' Disinfectants

JEYES' FLUID,
JEYES' POWDER,
CYLLIN MEDICAL,
CYLLIN MEDICAL CAPSULES (Palatinoids),

Jeysol

Identical in composition with Lysol, of absolutely equal efficiency, and making a clear solution.

Jeyes' Sanitary Compounds Co., Ltd., 64 Cannon Street, London, E.C.



SUPREMACY

The supremacy of the British Army has its counterpart in the superiority of "Rodine" as the rapid rat remover. "Rodine" cannot be beaten and has the greatest record of any rat poison on the market.

"RODINE" RAT POISON

is an attractively advertised, price-protected, quick-selling, profit-paying, satisfactory sideline, and is delivered free to any shipping port in the United Kingdom immediately on receipt of draft on London bank or indent through Wholesale House.

Further particulars from the Maker-

HARLEY, Manufacturing Chemist,
PERTH, Scotland.

EXPORT AGENTS:
TOZER, KEMSLEY & FISHER, LTD.,
84 Fenchurch Street, London, E.C.



the new preparation.

containing no poison,

for killing nits in children's hair, is now being
extensively advertised and
may be obtained through
any of the usual wholesale
houses, or direct from the

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THOMAS KEATING, LONDON.

JUST WHAT YOU WANT!!!

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GLASS BOTTLES

We make Vials, Poisons, all shapes and colours. Special Ammonia Bottles to meet the requirements of the Act.

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Mineral Vater Bottles.
all kinds.

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BOTTLE EXPERTS,

any special shape or colour made by our up-todate Patent Gas Furnaces and Machinery.

Before placing your orders elsewhere ask your Merchant to consult or write to

ORROCKS LTD., CREEKSMOUTH, BARKING, ESSER.

Established nearly a Century.

"ACME" WEED KILLERS

Have now a large sale through CHEMISTS, and early application should be made for illustrated Counter Bilis & Showcards

Awarded Gold Medal Anglo-American Exhibition. Commended by Royal Horticultural Society.



POWDER WEED KILLER.

Packed in small decorated tins. Immediately soluble in cold water,

All Tins Free. No return Empties. SPECIALLY ADAPTED FOR EXPORT,

LIQUID WEED KILLER.

Strength: 1 gall. sufficient for 25 galls. of Water.

AND DOUBLE STRENGTH.

ARSENITE OF SODA, 80% ARSENATE OF LEAD. QUASSIA CHIPS.

The Acme Chemical Company, Ltd. TONBRIDGE, KENT.

And RIVER STREET, BOLTON, LANCASHIRE.

DANYSZ VIRUS

Is on the P.A.T.A. LIST.



Retail Prices

2/- Per Single Tube 5/- For Three Tubes

PROFIT of 75% and 50%

RESPECTIVELY.

LIQUID VIRUS for large applications at 7/6 a bottle, making about 5 lb. of bait.

SHOWCARDS.— Dummy Boxes, Clockwork Cats for Window Display, Circulars, Postcards, &c., on application.

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DANYSZ VIRUS, LTD., (Dept. G A), 52 Leadenhall Street, LONDON, E.C.

HARVEY'S GREAT REMEDIES FOR HORSE

WITH THE ADDED REMEDIES.

(Protected Prices.)

HARVEY'S ACONITE POWDERS.

For Chronic Cough, Broken Wind, Roaring, &c.

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HARVEY'S HAIR RESTORING OINTMENT.

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THE ADDED REMEDIES: HARVEY'S KOPPOS POWDER,

For Lymphangitis, or Weed, and Inflammations generally. In Tins, 5/- and 10/- each.

HARVEY'S THRUSH SPECIFIC. In Tins 1/9 and 3/- each.

HARVEY'S HOOF OINTMENT.

In Tins, 3/- and 6/- each.
Also

HARVEY'S HAIR RESTORER (HUMAN).

A successful modification of the Veterinary Prepara

A successful modification of the Veterinary Preparation. In Pots, 2/- each.

The REMEDIES may be obtained of all the leading Druggists' Sundries Houses.

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"LINSEED COMPOUND"

KAY'S COMPOUND ESSENCE OF LINSEED.
(Now upon the P.A.T.A.)

The above is a well-advertised remedy of over 40 years' proven efficacy for the relief of COUGHS and COLDS.

Supplied by all the Wholesale Houses in London and the Provinces.

ALSO MAKERS OF

"KAY'S TIC PILLS."

MOUNTAIN FLAX ('Linum Catharticum')
PILLS.
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"CHLORO-LINSEED" COUCH LOZENCES.

"COACULINE."

Transparent Cement for broken articles. 6d. bottles.

"TENASITINE,"

A Liquid Cement in Tubes, 1d., 2d., 3d. and 6d.

Hydraulic Cement (heatproof), 6d. Tins.

KAY BROTHERS, LIMITED, STOCKPORT, England.

Telegrams: "Kay Stockport."

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TANGLEFOOT SEALED FLY PAPER.

CRICHTON-BROWNE.

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TANGLEFOOT FLY PAPER."

The Times, August 9, 1902.



ALABASTINE CO. BRITISH.

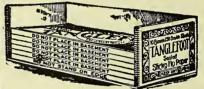
> CHURCH STREET. SOUTH LAMBETH.

LIMITED,

LONDON, S.W.

ALSO OF

All Chemists' Sundriesmen.



Parcel Post, packed, 150 Sheets, 5/-

Per case of 500 Sheets, 15/-

NEW SIZE TANGLEFOOT, 10/6 per case of 400 Sheets. TANGLEFOOT is specially adapted for hot Climates, and is sold throughout the world.

ON THE P.A.T.A. LIST. Guaranteed Profit—over 20%.

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CATARRH CURE SMELLING BOTTLES



In Two Shapes—one the well-known shape and size, the other small and flat for waistcoat pocket, &c. Your kind co-operation in introducing the

Your kind co-operation in introducing the new shape, and pushing the old is invited. Effective, well got up, well-advertised, easy to sell, having largest sale of any Smelling Bottle in the World.

Packed in fancy cardboard cases—the Round Bottles in Half-dozens, and the new-shaped Flat Bottles in one Dozens—and obtainable from all Wholesale Patent Medicine Warehouses.

Handbills and Showeards will be sent to

Handbills and Showcards will be sent to any willing to use them from

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The Best of all Fly Catcher's



TUNBRIDGE & WRICHT'S **Fly Cemetery**

The original and best of all Sticky Fly
Papers, 5/- per gross
net, carriage paid.
Cash with order.

TUNBRIDGE & WRIGHT'S **Cemetery Fly Tape**



Very neat, simple, and effica-cious, 6/6 per gross net, car-riage paid. Two gross lots and up 6/- per gross, carriage paid. Cash with order.

TUNBRIDGE & WRIGHT'S **Cemetery Fly Band**

The neatest, simplest, and cleanest of all band catchers. Packed in boxes containing three dozen. 7/- per gross net, carriage paid. Cash with order.

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Equal to the best German make in every respect—that is the verdict of leading Actors and Actresses to whom samples were sul mitted. The success of "FACUP" is the result of long-continued experiments by expert Chemists, and it is placed on the market with complete confidence as an efficient substitute for the foreign article.

SPREADING & COVERING POWER UNSURPASSED.



EOUAL TO ALL DEMANDS

describes the Fountain Fen everyone wants. The cheap types only cause disgust and drive the user to conclude that a fancy price must be paid to obtain a reliable pen.

Our "258" Fountain Pens are the equal of any for work-even the most expensive. Our own staff use them almost exclusively -they are in continuous use and always give satisfaction - no test could be more

severe, and it is a line every Chemist can sell.

HARMLESS COLOURS (DO NOT STAIN THE SKIN)

ABSOLUTELY FREE FROM GRIT

CORRECT IN MELTING POINT

> PERFECT SHADINGS

IN BOXES OF 1 DOZ. FULL SIZE STICKS. PER DOZ. STICKS, 8/4 ,, GROSS ,, 86/-

COLLAPSIBLE ALUMINIUM DRINKING CUP



Just the thing for Military Field Work, Travelling, etc., as it occupies little space and is practically no weight. It measures 23 by 25 in. open and 1 by 25 in. closed.

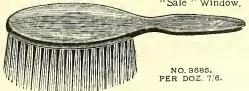
Being all-metal there is nothing to break or get out of order, it is untarnishable and the cover keeps it clean in the pocket. The price brings it within the reach of every Territorial.

PER DOZ. 2/6.

A Job Line.

WHALEBONE HAIR BRUSHES TO RETAIL AT 1/-

Real whalebone, 1½ in., satinwood polished back, Suitable for quick sales long oval shape. and cheaper class trade or as a leading line for a



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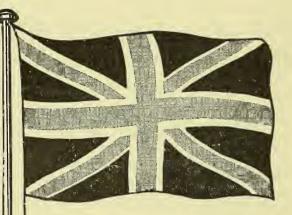
258 EUSTON RD. LONDON

May, Roberts' Traveller.

No. 4023 CITY.

APRIL 24, 1915

LONDON & DUBLIN.



BULL DOG



EAU DE COLOGNE

Prepared from 90%. Alcohol of the highest grade, and from selected Essential Oils, it is guaranteed to be equal in quality to the finest Continental Brands.

PRICES:

1-oz. size, 4/7 per doz. 2-oz. size, 8/6 per doz. 4-oz. size, 16/6 per doz.

5 % Discount.

Handsome Showcards.

May we send a Sample?

MAY, ROBERTS & CO., LTD. 7,9 & 11 Clerkenwell Road, LONDON, E.C.

AND AT 16 WESTMORELAND STREET, DUBLIN.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, APRIL 24, 1915

TO ADVERTISERS IN THIS SUPPLEMENT.

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., MUST BE PREPAID (except in the case of sorial advertisers), and to ensure prompt inserties REMITTANCES MUST ACCOMPANY INSTRUCTIONS.

Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph as nigent announcement this may be done

PROVIDED the MONEY is TELEGRAPHED

at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Sapplement by making careful note of these rules. Telephone: No. 3017 Central (3 lines). Telegraphic Address: "Chemicus Cannon London." (Three words counted as two.)



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definite returns from spasmodic and inflated circulation, but regular, steady success—the best possible in the Drug Trade. It gives

PAY FOR. PUBLICITY PAYS TO THE

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone Number: City 2283.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—PARTNERSHIP.—A Partner required in very old established Business with Branch, situate in the Eastern Counties; a good opcuing presents for a gentleman with small capital.

2.—MIDDLESEX (8 Miles North of London).—Price, goodwill and fixtures, £450; stock at valuation; returns exceed £1,500; net profit £400 to £450; well-appointed shop and residence; held on lease; satisfactory reasons for disposal; inspection invited.

3.—SURREY.—Essentially Dispensing and good middle-class Family Business; returns £1,287; net profit, after all expenses paid, 25 per cent.; terms, lease and goodwill, £200; stock and fixtures at valuation.

4.—ESSEX (Within Easy Distance of Town).—Small Retail and Dispensing, giving a clear profit of over £230; rent £33, which includes 8-roomed house; no near opposition; price about £260; vendor retiring.

5.—LONDON, S.E. (Favourite Residential Suburb).—A good but neglected Business; returns, under assistant, between £600 and £650; handsomely fitted Pharmacy and roomy house, private entrance; owner has large business in another district and this one is capable of increase; price £420.

6.—LONDON, N.E.—Vendor will accept £300 cash for an early release; ready-money Business; net income about £250; comfortable residence; ill-health cause of sale.

7.—VILLAGE BUSINESS (Suffolk).—Genuine Country Retail and Photographic, returning between £850 and £900 at fair prices; double-fronted shop, situate in the market place; terms of payment could be arranged to suit purchaser; death cause of sale.

8.—KENT (Death Vacancy).—Well-established Business; returns £1,000 to £1,100; net profit £400; situate in one of the best positions, and capable of considerable increase under personal management; every investigation allowed; valuation terms enter-

9.—SOMERSET.—Unopposed Retail; returns £900; net income £300; price £550; good house, garden, and greenhouse; net rental about £24.

10.—SUSSEX.—Unopposed Business (neglected); returns £825; net profit £250; double-fronted shop, well fitted and fully stocked; good residence, bath (H. and C.); price £500.

11.—GLOUCESTERSHIRE.—Unopposed Mixed Business for Disposal through ill-health; returns about £50 per week; scope for development; price about £850.

12.—LANCASHIRE.—Cash Business, with Optical Department, situate in one of the principal streets; returns £1,370; net profit £580; terms, valuation of stock and fixtures, and sum for goodwill to be arranged equitably.

13.-YORKSHIRE (Village).-Retail, Prescribing, and Agricultural, with some Extractions; returns £450; net profit £160; rent £19, including commodious residence; price £250, about value of stock and fixtures.

14.—YORKS.—For immediate Disposal through death, Drysalter's Business; established many years; returns £434; profits half; terms, valuation, estimated at £200.

VALUATIONS

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties, and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

THE CHEMIST AND DRUGGIST SUPPLEMENT

APRIL 24, 1915

BRETT

Licensed Valuers,

73 LAUREL ROAD, LEICESTER.

Telegrams, "Brett Leicester."

Telephone 1934.

F. J. BRETT, M.P.S.,

GIVES PERSONAL ATTENTION TO ALL VALUATIONS. NO CHARGE TO BUYERS.

AGENCY.—We have always a large number of Buyers on our books, and we can frequently find a purchaser at once. We also have a Private Register for vendors who are in no hurry to sell, and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS to the Entire DRUG TRADE.

£1,500 returns.—EASTERN COUNTIES.—Good house, garden, etc.; country district; net profit about £400; price £875.

 $\pounds700$ returns.—DEVON.—Light good-class Retail, in picturesque district; price $\pounds300.$

£900 (nearly) returns.—SOUTH.—First-class Retail and Dispenses, with aristocratic connection; plenty of room to extend; price about £750.

 $\pounds 9$ returns weekly, capable of doing $\pounds 20.-LIVERPOOL.-Good corner shop, near Docks; very profitable; price <math display="inline">\pounds 170.$

£430 returns .- SHEFFIELD .- General Retail, with appointment worth £60 per annum.

£600 returns.—LONDON, S.W.—General Light Retail, in desirable suburb; qualified man would greatly increase.

£1,400 returns.—WEST COAST.—Exceptionally nice-class Retail, with good Specialities; unlimited scope for Optics and Photo; very desirable house, garden, etc.; price £900.

We have cash Buyers for businesses from £500 to £5,000.

Valuations conducted upon the shortest notice at moderate fees.

BERDOE &

VALUERS & TRANSFER ACENTS. 35 Jewry Street, Fenchurch Street, City. Telephone: 1809 CENTRAL.

NO CHARGE TO PURCHASERS.

1.—WEST MIDDLESEX.—Good-class, in best position; returns £1,510: good profits; handsome modern Pharmacy; price for goodwill and fixtures £450; stock at valuation.

2.—SOMERSET.—Good Family Retail and Agricultural; returns £1,100; low rent; pleasaut market town; price £600; part can remain.

remain.

3.—HOME COUNTY.—Old-established Business, in market town; returns £1,300; net profit £400; large premises; price £800.

4.—NORTH WALES (Seaside).—Death vacancy; good sound concern; returns £550 to £650; low rent; fine position; price

5.—SHEFFIELD (Death Vacancy).—Old-established; returns £434; plenty of scope; corner premises; valuation required, about

2200.
6—SUSSEX COAST.—Unopposed; returns over £800; net profit £250; central position; good house; price £500.
7.—KENT COAST.—Good-class Retail, in commanding position; returns about £1,200; low rent; price £550, or offer.
8.—SOUTH WALES.—Cash Retail; returns £1,236; net profit averages £350; good position; price £600; part can remain.
9.—ESSEX.—Unopposed village Business; returns about £400; very profitablo; nice house and garden; price £120, or valuation, less 20 per cent.
10.—KENT (40 Miles out).—Unopposed Light Retail; easily worked; returns about £600; modern house; price £350.
11.—LONDON, S.W. (Good Residential Locality).—Returns last year £1,200; net profit £300; fine premises; price £700.
12.—LONDON SUBURBS.—We have a large selection of Businesses on our registers; prices from £150 to £1,500; please state requirements.

STOCKTAKINGS.

We undertake stocktakings on a very low scale of commission or an agreed fixed fee, and also price out Chemists' own stocktakings. apply for our terms.

Businesses Wanted. Buyers Waiting.

PARSON C. BAKER

1 MOUNTFIELD ROAD, CHURCH END, FINCHLEY, N.

50 years' experience in every branch of business.

Recommended by—
BRITISH DRUG HOUSES, LTD.

MEGGESON & CO., LTD.

BARCLAY & SON, LTD.

All correspondence should be addressed as above. And at 174 VICTORIA ST., S.W., Ph.C. Tel. No. Victoria 27.

DEATH VACANCY.—After continued ill-health a neglected Business, now returning only £450, in best end of popular and increasing pleasure resort, East Coast; should return £1,000 easily; excellent modern house and large, woll-fitted shop; rent £55; price asked £300.

VENDOR retiring on competency obtained solely from business now offered for sale on account of ill-health; returns under manager; large town South Wales; Welsh not necessary; value of stock and fixtures only, and part purchase money can remain; best position; personally inspected and recommended.

PROSPEROUS Business in Carmarthenshire returning over £2,300, including Gilbey's sole agency £850; N.H.I. £150; vendor, entering the medical profession, will accept first reasonable offer near the value of the stock and fixtures, about £1,000.

Valuations for any purpose promptly conducted at moderate prices.

THOS.TOMLINSON & SON

CHEMISTS' VALUERS, TRANSFER AGENTS, AND EXPERT STOCKTAKERS.

45a MARKET STREET, MANCHESTER. ESTABLISHED OVER HALF A CENTURY. Telegraphic Address: "Tomtom."

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

BUSINESSES FOR DISPOSAL.

3s 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

Price-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

BRADFORD.—Old-established Light Retail Drug Business for Disposal at once; main thoroughfare, near Town Hall; reason, age; good opening for Panel. Particulars from "S. H.," 113 Bridge Street, Bradford.

RAST LANCASHIRE.—Good-class Retail and Dispensing Business for Sale in manufacturing town; shop splendidly situated in main thoroughfare; well stocked, modern fittings, electric light; convenient house, separate entrance; reasonable rent; splendid opportunity for energetic young man. Apply, 27/27, Office of this Paper.

KENT.—Mixed Country Business, doing £500 and increasing; good opening for Optics and Dentistry; well-stocked shop; prices good and mostly cash; rent £28; rates about £7; price £275, or nearest offer; nearest opposition 4 miles; full investigation offered. The Pharmacy, Minster, Thanet.

LANCS (Popular Resort).—Sound Business, Light Retail, Prescribing, Photographic; handsomely fitted in mahogany; well stocked; occupies prominent position; double-fronted; turnover £670; exceptional profits; easy rent; valuation £410; good opening for Optics; price £330 for eash. Apply, 40/33, Office of this Paner. Paper.

LANCASHIRE:—Business for Disposal, near Manchester; returns (including Insurance, between 8,000 and 9,000 per annum) about £950; net profit £325; books kept. Full particulars to genuine buyers on application to 30/35, Office of this

ONDON, N.—Main road; neglected; good opening N.H.I., Optics, or Dentistry; populous neighbourhood; no near oppo-tion; splendid scope for energetic man; convenient house, perate entrance; outside recently redecorated; trams stop out-de; low valuation for quick sale. Apply, "Strebor" (42/5), sition; separate Office of this Paper.

JONDON, S.E.—An old-established Business for Sale; unique position; increasing returns under management; exceptional opportunity for energetic man; well stocked; long lease; good reasons for disposal; bargain to immediate purchaser. Apply, 44/7, Office of this Paper.

ONDON, S.W.—Advertiser, wishing to do his little bit by joining the Colours, is looking out for a quick purchaser of his Business; price, valuation of stock and fixtures. Apply, fixing your own time convenient for inspection and investigation, to "Push and Go" (30/32), Office of this Paper.

MIDDLESEX.—Handsome Pharmacy Lock-up in charming high-class residential district; plenty of scope; excellent opportunity for beginner; opened last year; reason for disposal, management trouble; 7 years' lease (renewable); price £450, cost of fixtures and stock only. 46/14, Office of this Paper.

MIDDLESEX.—Unopposed Business; good class and Family; convenient house and long lease; average net profit for last three years quite £500; price £775; if necessary half can remain at interest; trial allowed; usual deposit; retiring through ill-health and family reasons; reference required for reply. Address, 44/2, Office of this Paper.

MONMOUTHSHIRE.—Drug Store, in good industrial district with population of 14,000; cash trade; good progressive business; returns last year £800; splendid chance for qualified man; nearest two miles; satisfactory reason for disposal; valuation only. Apply "Urgent" (44/31), Office of this Paper.

NORTH OF ENGLAND.—Progressive Optical Business; growing town, healthy situation; comfortable house; splendid opening for Chemist-Optician; nominal competition; low price for goodwill, stock at valuation. 78/72, Office of this Paper.

SOUTH CROYDON.—Excellent opening for Photographic Chemist and Drug Stores. For particulars of available suitable premises in best positions apply, King & Everall, 117 South End, South Croydor, and Branches.

SURREY.—Good-class locality; casy distance from West End; Light letail and Dispensing Business; returns last year £1,200; net profit £300; handsomely fitted and well-stocked shop; excellent longs; price £700, or £100 and valuation of stock and fixtures; breaklown in health compels immediate sale. 46/13, Office of this Paper. Office of this Parer.

WEST LONGO: For immediate Disposal, Cash Retail in busy neighbourhood; returns £10-£12 weekly, showing very good profits, and an addition of over 2.500 N.H.I. Prescriptions dispensed annually; business established 11 (eleven) years; same proprietor; genuiae concern offering great increase under young or middle-aged energetic man; opening for Dental; every investigation; books properly kept; owner's age and rapid decline in health sole reasons for disposal, and first and nearest offer to £250 will be accepted to effect a speedy sale. 46/18, Office of this Paper.

YORK.—Old-established Drng Business for immediate Sale; busy thoroughfare; easily worked; suit qualified man; stock and fixtures £100. Apply, J. H. Turner, Solicitor, York.

YORKSHIRE (North-East Coast).—Old-established Business for valuation of stock and fixtures; well fitted; no agents. 45/7, Office of this Paper.

PIRST-CLASS Light Retail and Dispensing Business for Disposal, within 30 miles of London; returns £3,000; gross profit 40 per cent.; scope for doing at least another £1,000 a year; suit two energetic young men with not less than £2,000. Address (enclosing reference), "Nemo" (46/013), Cffice of this

POR Sale, Chemist's and Druggist's Business; 40 years' establishment; well-stocked shop, with smafi dwelling-house attached, in main business street of thickly populated working-class neigh-hourhood; selling owing to proprietor's death; price £120; splendid chance for young man requiring a good start. Apply, Riley, 25 Horsefair Street, Leicester.

OLD-ESTABLISHED Drug Business; very profitable; main road; working class; Manchester; nicely fitted; well stocked; low rent; good living accommodation; exceptional opening for Insurance work; about £200; owher retiring; only bona-fide applications answered. Address, "Pax" (41/8), Office of this Paper.

PLEASANT suburban residential district; returns over £500; good house; well established; splendid opening for beginner; good prospects; well fitted and stocked; valuation of stock and fixtures. Wilson (46/2), Office of this Paper.

TO WHOLESALE CHEMISTS. DRUGGISTS, DRY-SALTERS, AND OTHERS.

To be Disposed of by Tender, the Business as carried on at Belper, near Derby, as a going concern by Messrs. W. P. Adshead & Co., Ltd., including the whole of the valuable Stock-in-Trade, Book Debts, Freehold Premises, Fixtures, Goodwill, and the Receiver's Interest in certain Contracts.

The Business has been established over 50 years, and enjoys a well-earned reputation for the excellence of its Proprietary Articles, Derby Furniture Cream, etc.

For further particulars and to view apply to Mr. R. E. Clark, 17-Albion Street, Hanley, Chartered Accountant, to whom Tenders for the whole, or for the Goodwill, Book Debts, Stock-in-Trade, Fixtures, and uncompleted Contracts should be delivered on or before 4 o'clock p.m. on the 10th May prox.

Neither the highest nor any Tender will necessarily be accepted.

Neither the highest nor any Tender will necessarily be accepted.

MALL Retail and N.H.I. Dispensing Business in Kent; price wanted £160; good house; low rent; special reason for selling; on easy terms to suit purchaser; suit young qualified or unregistered man. 41/16, Office of this Faper.

SMALL genuine Business at Lancashire Seaside Resort; nicely stocked; suit man with small capital; stand every investigation. Full particulars apply, 45/1, Office of this Paper.

£170.—Ready-money Business, London; busy market; work-and capable of large increase; no N.H.I. done; well stocked; good house accommodation. 46/30, Office of this Paper.

TO LET.

BATTERSEA PARK.—In thickly populated working-class neighbourhood good Corner Shop and House, with side entrance; low rent, £34, or shop and rooms only 10s. per week inclusive; fixtures at valuation; suit Chemist or Herbalist. Bell, Son & Co., 411 Battersea Park Road.

CHEMIST; good opening at Beckenham Road, Penge, S.E.; owner would advance part cost of fitting; good house, 8 large rooms, bath; low rent, £40; private door. Particulars, Bathurst & Son, Dalston Junction, N.E. 'Phone, 199 Dalston.

CPLENDID opening for Chemist; good-class village, Kent; 4,000 inhabitants; district 8 to 10,000; only one Chemist; Shop and House to Let; central position; rent £28, with stable and coachhouse £35. 40/1, Office of this Paper.

FOR SALE.

REAL Bargain.—Nearly new National Cash Till; Ticket Printer with assistants' keys; amount keys to £2. Write, C. H., 59 Ferndale Road, South Tottenham, N.

S TOCK of Drugs, etc., and Chemist's Shop Fittings left on premises for rent for Sale by the landlord; inspection invited. Apply, Burgess, Cosens & Co., 5 Laurence Pountney Hill, E.C.

TWO Warrick Motor-cycle Cars; in perfect going order; bought last June; cost £110 each. What offers to W. T., c/o Burgoyne, Burbidges & Co., East Ham, E.

PARTNERSHIPS.

PARTNERSHIP, with a view to.—Wanted, post by young Chemist thoroughly experienced in Retail, Dispensing, Photographic; and Veteriuary business; Wholesale would be considered; advertiser is energetic, good Salesman, and desirous of settling to a permanency to which whole energies would be devoted. 43/33, Office of this Paper.

AGENCIES.

A N Opportunity.—An old-established firm, with large Home and Colonial connection with general manufacturers, is open to exploit any good thing for which a general market could be created. Address, 61/39, Office of this Paper.

BUSINESSES WANTED.

WANTED, Chemist's Business in Manchester or District. Please send full particulars as to turnover, locality, etc., with lowest price, in confidence, to 43/22, Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; cc. for every 10 words or less beyond, prepaid.

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This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

RETAIL

BATH.-Messrs. Henry Hodder & Co., Ltd., have vacancy for Junior Assistant; must be good Counterman with satisfactory references. Apply, Managing Director, Hodder's, Ltd., 5 Nelson Street, Bristol.

BIRKENHEAD.—Smart Junior for good-class Dispensing business. Apply, with usual particulars and salary required (outdoors), to W. S. Robinson, York Place, Birkenhead.

BIRKENHEAD.-F. C. Cooling, Oxton, will require (shortly) a Junior Assistant (outdoors) accustomed to Dispensing business.

BIRMINGHAM (Part Time).—Smart young unqualified man required to take charge for Chemist on Wednesday evening; would suit Minor student. "Kings" (43/14), Office of this Paper.

BIRMINGHAM Suburb.—Reliable and capable Junior for Counter, Dispensing, and Windów-dressing in clean Light Retail business: comfortable permanency for suitable man. Bramleys, 87 Holyhead Road, Handsworth, Birmingham.

BIRMINGHAM.—Assistant; unqualified; experienced; gentle-manly; good Salesman and Dispenser; one accustomed to good-class trade, Apply, giving full particulars of age, height, experience, salary required (outdoors), and, if convenient, enclose photograph, to Manager, Hedges (Chemists), Ltd., 10, 11, 12, Dale End, Birmingham.

BOLTON UNION.—Wanted, for the Townleys Hospitals, Farnworth, near Bolton, a qualified female Dispenser; salary £80 per annum, with rations, apartments, and washing; applications, on forms which may be obtained from me with print of conditions of appointment, and for which a stamped addressed foolscap envelope must be enclosed, may be sent to me not later than Saturday, May 1, 1915; canvassing the Guardians, either directly or indirectly, will be a disqualification. H. I. Cooper, Clerk to the Guardians. 28 Mawdsley Street, Bolton, April 8, 1915.

PRIXTON, S.W.—Wanted, a Dispenser for occasional Evening work; at least two evenings a week; lady entertained.

CITY AND COUNTY OF BRISTOL.

HAM GREEN HOSPITAL AND SANATORIUM, PILL, NEAR BRISTOL

APPOINTMENT OF DISPENSER (MALE OR FEMALE). THE Health Committee desire applications for the above appoint-

THE Health Committee desire applications for the above appointment.

Candidates must be qualified Dispensers, and the officer appointed will be required to devote the whole of his or her time to the service of the Corporation.

The duties will consist of the necessary Dispensing for the Hospital and Sanatorium, assisting in the clerical work and in the work of the Laboratory.

Candidates should state their qualifications and experience, and salary required (dinner and tea provided).

Applications to be forwarded to the undersigned not later than Saturday, May 1, 1915.

D. S. DAVIES, M.D., Medical Officer of Health.

40 Prince Street, Bristol, April 20, 1915.

DURNLEY.—Wanted, Assistant, unqualified, at once, for General, Retail, and Dispensing; outdoors; easy hours. Please state age, experience, salary, with references, Heaton, Chemist, Burnley.

CARDIFF.—Wanted immediately, a smart qualified or unqualified Manager; married preferred; age 40 to 50; must be a good Counterman and Preseriber; one with Store experience preferred. Apply, with full particulars and salary required (outdoors), "Quinine" (45/20), Office of this Paper.

CHESTER.—Wanted, Junior Assistant, accustomed to Dispensing and good Retail. Apply, stating age, experience, references, and salary, Thomas Carter, Ph.C., Boughton, Chester.

CITY.-Young Junior Assistant wanted; outdoors; no Sunday or night duty. Apply, "X. Y. Z.," 19 Holcombe Road, Ulford. Essex.

COVENTRY.—Junior Assistant wanted; Dispensing and Counter alternate weeks; liberal salary to right man. State age, experience, salary required (outdoors), references, Bird, Chemist, Spon Street.

POLKESTONE.—Wanted, about May 1, Assistant (25-30), one with Continental experience preferred, for high-class Light Retail, Dispensing business. Photo and particulars to Rausford & Canuingham, Folkestone.

CORLESTON-ON-SEA.—Assistant, qualified, at once (indoors): elderly gentleman would suit; comfortable berth; no Sunday dnty; half-holiday weekly. Apply, stating references, age, experience, and salary required, photo if possible, to P. R. Hill, Photographic and Pharmacentical Chemist, 90 High Street, Gorleston-on-Sea

LANCASHIRE (Preston).—Unqualified Junior required for brisk Mixed business; must be capable Dispenser and Counterman. State age and salary required, 43/104, Office of this Paper.

EAMINGTON SPA.—Experienced Assistant (outdoors) for best-class Dispensing business; not necessarily qualified. Full particulars of past experience and references, with photo (to be returned), to Hutton, Pharmaceutical Chemist.

EICESTER.—Junior unqualified Assistant required; must be a good Counterman and Dispenser. Please state particulars of experience, references, age, height, salary required, and enclose photo (will be returned), Berridge, Ltd., Chemists, Leicester.

RETURNING PHOTOS. Etc.

Advertisers in this Section who receive portraite and copies of testimonials from applicants with a stamped addressed envelope for reply are reminded that the undue retention of these often means a hardship to the cender. All personal documents should be returned as promptly as possible after perusal

TO SAVE TROUBLE.

MANY correspondents a swering advertisements in this Supplement enclose remitta sees to cover the cost of forwarding their the tenths of tenths the control of the control of

ANSWER IN TERMS OF THE ADVERTISEMENT AND

- REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a MENTAL PICTURE of your suit ablences.
- BE BRIEF BUT CLEAR .- M: Ilions of applications are consigned a the waste-paper basket UNCONSIDERED, because the reader cannot form this picture from the inadequacy of the material set before him.

LEICESTER.—Capable, unqualified Assistant wanted, used to high-class Dispensing, good Counterman, with knowledge of Photography; outdoors; short hours; early night fortnightly; no night duty; Sunday duty two hours monthly; spleudid experience; special Technical School Pharmaceutical Classes; good salary. Particulars, with returnable photo if available, Young & Sons, Chemists, Leicester.

L'ANDUDNO.—Assistant, also Junior, required for Dispensing and General Retail business; outdoors; Assistant to sleep on the premises. Send photo and full particulars to Lewis A. Cocker, Pharmaceutical Chemist, Llandudno.

LONDON.—Assistant, qualified, wanted immediately; outdoors. Spink, 27 Tottenham Court Road, London, W.

LONDON (Central).—Outdoors; qualified Assistant speaking French and with Continental experience. Apply, with full particulars of experience, etc., to 45/13; Office of this Paper.

ONDON.—Vacancy occurs in a large Pharmacy for a Lady Dispenser. Applicants please give full particulars in first letter as to salary, etc., to "Manager" (56/73), Office of this Paper.

LONDON (City).—Young qualified Assistant required for highqualified. State age, salary required, and when at liberty, 43/140, Office of this Paper.

ONDON, E.C.—Junior or Improver; outdoors; principally for Stock and N.H.I.; time could be arranged for study; good opportunity for acquiring a good business training. Kindly give full particulars in first letter, Waterhouse, Pharmacist, 18 Exmouth Street, Clerkeuwell, E.C.

LONDON (Near).—Qualified Assistant; not under 30; gentlemanly and accustomed to good-class business; indoors; very comfortable home; required about middle of May. Usual particulars to J. E. Hyde, Pharmacist, Bush Hill Park, Enfield.

LONDON, N.—Reliable qualified Manager wanted for quick medium-class trade; salary £3 per week, with free house and commission. Apply, 44/39, Office of this Paper.

JONDON, N.—Junior or Improver; two assistants kept. Apply of references, when disengaged, and salary required (in or outdoors), "Chemist," 115A Stoko Newington Road, N.

LONDON, N.—Junior Assistant, about 21, for good-class business; one whole day off weekly; salary £2 per week; outdoors; hours 9 a.m. to 9.30 p.m. and alternate Suuday evenings. Long, 9 Broadway, Stamford Hill, N.

I ONDON, N.E.—Junior Assistant (outdoors) for a good-class suburban Branch. Apply, stating age, height, experience, and salary expected, Matthews & Son, Pharmaoists, 722 High Road, Leytonstone.

ONDON, N.E.—Qualified Assistant for Retail and N.H.I. Dispensing; working-class ueighbourhood; permanency to a reliable man. State salary, etc., to "Limited" (46/23), Office of the Paper.

LONDON, N.E.—Qualified Assistant; elderly preferred; comfortable ber'h for reliable man desiring a permanency. State references, solury, and all particulars to "Senex" (46/33), Office of this Paper.

LONDON, N.W.—Assistant wanted; in- or out-doors; unqualified; permanency; a good Counterman and Window-dresser; one only kept; age about 30. Personal application preferred; if by letter state experience, height, salary required, and enclose photo (to be returned), Wimbush, 195 High Street, Camden Town.

LONDON, N.W.—An excellent opening occurs for a reliable man, qualified preferred, wishing a permanency; to one of industrious habits and possessing undeniable references mutual arrangement would be made as to hours, etc.; no Sunday duty. Write full particulars to 42/27, Office of this Paper.

LONDON, S.E.—Qualified Assistant wanted; middle-aged preferred; for one seeking an easy berth this should appeal to him. Please give full particulars as to age, salary required, and references to "Immediate" (43/16), Office of this Paper.

LONDON, S.W.—Wanted at once, Junior or Improver; or experienced lady Assistant might suit; Light Retail, Photographic; not much N.H.I. work. Usual particulars, stating salary required and when disengaged, to Durbin's Drug Stores, 106 High Street, Wandsworth, S.W.

LONDON, S.W. (Suburb).—Junior Assistant (outdoors) required at once, State full particulars of age, references, and salary required to "K. W." (44/38), Office of this Paper.

LONDON, S.W.—Unqualified Assistant wanted as Senior; outdoors; not under 30; salary £2 15%, per week; Sunday duty every third; high-class Dispensing and Counter experionce essential, and must be reliable and accurate. State age, height, and full particulars, also when at liberty, to † Pharmaoist" (44/23), Office of this Paper.

I ONDON, S.W.—Wanted, competent reliable Assistant for the Dispensing Counter (no N.H.I.); application from lady Dispensers with good experience entertained. Full particulars to Manager, Francis & Son, Ltd., 448/50 Brixton Road, S.W.

LONDON, S.W.—Wanted, an Assistant who has had good Dispensing experience; qualified; 23 to 30 years of age. 44/32, Office of this Paper.

LONDON, W.—Wanted, an experienced Assistant for high-class Dispensing business. 46/32, Office of this Paper.

ONDON, W.—Qualified Assistant to sleep indoors. Application, by letter, giving particulars of experience, etc., to J. R. Walker, 36 New Cavendish Street, W.

MANCHESTER.—At once, a competent and reliable Assistant; unqualified; about 25; outdoors; Counter, Dispensing, Window-dresser. State salary required and give full particulars to Johnson, Chemist, Prestwich.

MANCHESTER.—Smart unqualified man required to take charge of progressive business in a working-class locality; permanency with liberal interest in the profits for a man willing to "take his coat off." "M. R." (304/14), Office of this Paper.

MARGATE.—Qualified Branch Manager for permanency; competent and trustworthy; about 30; good-class Retail and Dispensing business. Full particulars of last two engagements, ago, height and photo if possible, state salary (unfurnished rooms on premises). W. M. Rosser, Baily & Co., 2 Ethelbert Terrace. Margate

MIDLANDS.—Reliable qualified man wanted for, a sound oldestablished and well-known business to take charge in absence of proprietor; preferably with Optical experience; must be smart and up-to-dato business man with Selling ideas and ability; good prospects; partnership entertained with the right man. Address, with full particulars, age, references, experience, and photo, to 43/37, Office of this Paper.

MIDLANDS.—Qualified Manager (outdoors) to take sole charge required for old-established Light Middle-class business, with little N.H.I. Dispensing; should be a good Counterman; a comfortable and permanent berth for an energetic, competent, and trustworthy mau; half-day holiday weekly; no Sunday duty. Reference, age, and salary required to 43/15. Office of this Paper.

NEAR Manchester.—Wantod, unqualified Assistant; outdoors; must be good Dispenser and Counterman. Full particulars and wages required to McKinlay, Chemist. Glossop.

NEAR Manchester.—Wanted, young Lady for Dispensing and Counter. State age, salary, experience, and references, 45/035, Office of this Paper.

NEAR MANCHESTER.—Wanted, qualified Assistant for quick Cash business; £3 per week and commission; must be smart, a willing worker, and good Salesman. Address with full partionlars, age, references, and photo, to 45/35, Office of this Paper.

NEAR MANCHESTER.—Unqualified Assistant for quick Cash business; must be reliable and a good Salesman; salary 30s. per week and commission. 45/350, Office of this Paper.

NORFOLK WAR HOSPITAL, Thorpe, Norwich.—Assistant Dispenser required at once; qualified; salary £2 10s, weekly with dinner daily. Apply, with copies of two recent tostimonials, to the Dispenser.

NORTH-EAST COAST.—Opening for qualified Chemist; suit elderly man; house over shop if desired. Apply, England, Starbeck Hall, Harrogate.

NORTHAMPTON.—Qualified Assistant wanted for Retail and Dispensing department; outdoors. State experience, references, and salary, and enclose photo, Philadelphus Jeyes & Co., Ltd., 6 The Drapory, Northampton.

NOTTINGHAM.—Wanted shortly, competent unqualified Assistant; outdoors; quick Dispenser and good Counterman: one with fair experience; moderate hours; no Sunday or Bank Holiday duty. Address, with full particulars of age, experience, and salary required, to W. J. Clay, late C. A. Bolton, 40 Carlton Street, Nottingham.

PETERBOROUGH.—Wanted, qualified outdoor Assistant. Please state age, experience, and salary required to Hall, Pharmaceutical Chemist, Peterborough.

PLYMOUTH.—Qualified Assistant required for Light Retail business; no Insurance Dispensing; outdoors; permanency to a roliable man requiring comfortable berth; must have undeniable references; elderly gentleman not objected to; state salary required, Apply, Stokes, Union Street, Plymouth.

HREWSBURY.—Junior; outdoors; no Sunday or extra duty; please send full particulars in first letter, where experience has been obtained, salary, etc. Apply, A. Williams, M.P.S., 25 Victoria Street, Shrewsbury.

SOUTH COAST.—Assistant required; experienced; permanency, with good salary. Timothy White Co., Ltd., Chemists, Portsmouth.

SOUTH COAST.—Middle-aged, qualified Assistant required for Branch; married preferred; permanency; pleasant house; easy hours; close for lunch; no Sunday duty. Give full particulars and salary required in first letter, Frost, The Bridge Pharmacy, Worthing.

SOUTH COAST.—Ordinary Retail and Prescribing, some N.H.I. work; Extractor with knowledge of Dentistry preferred, but not essential if willing to learn. State full particulars as to age, experience, references, when at liberty, and salary required; also vacancy for Improver in market town; knowledge Photography. 44/3, Office of this Paper.

ST. LEONARDS-ON-SEA.—Assistant wanted (indoors) for Light Retail and Dispensing. State age, height, references, and salary required, enclosing photo, to T. W. Jones, 55 Bohemia Road. St. Leonards-on-Sea.

STAMFORD.—Wanted at once, Junior Assistant. Apply, with reference, stating experience, salary required, etc., and enclosing photo, to F. Dickinson, St. Mary Street, Stamford.

WINDON.—Reliable Assistant wanted for good-class Family and Dispensing business; capable of taking charge occasionally; no Sunday duty; permanency. Send particulars, if married, salary required, and experience to Shawyer, Chemist, Swindon.

TORQUAY (outdoors).—Qualified Assistant, competent to manage Branch, Light Retail and Dispensing. Apply, stating age height, experience, and salary required, enclosing photo, Frederick March, 90 Belgrave Road, Torquay.

WESTCLIFFE-ON-SEA.—"Body's Pharmacies," Chemists and Ophthalmic Opticians, have a vacancy for good qualified or unqualified Assistant, also Junior; must be accurate Dispensers and accustomed to good-class modern Retail; faoilities for experience and progression. State full particulars and salary required (indoors) first letter, enclose photo or suggest personal interview, Body, "Westwood," Westcliffe-on-Sea.

WEST COUNTRY (Seaside Resort).—Competent Assistant for Dispensing business; outdoors. Send photo and full particulars, "C." (43/36), Office of this Paper.

WEST OF ENGLAND.—Qualified Manager required for small Branch; hours easy and work light. 43/38, Office of this Paper.

WINDSOR.—Assistant (qualified preferred) wanted for Light Retail, Dispensing, and Photographic business; very little N.H.I.; batchelor's quarters; easy hours and unusual facilities for recreation; a knowledge of French would be useful, but not essential. Apply, stating usual particulars, to F. G. Saunders, 41 St. Leonard's Road, Windsor.

WORTHING.—Assistant wanted; outdoors; permanent; goodclass business. Send particulars, with references, to W. Aston, Pharmaceutical Chemist, Worthing.

YORKS (West Riding).—Elderly qualified Assistant required for comfortable berth; easy hours; light work. "Elderly" (43/014), Office of this Paper.

A COMPETENT Assistant, about 25, outdoors, as Junior. Apply to W. F. Pasmore, 320 Regent Street, London, W.

A COMPETENT Assistant in good-class Country business (outdoors), seaside; from now to September; Photography. State age, salary, and give references, 43/25, Office of this Paper.

A YOUNG Lady with experience to Assist in Pricing Insurance Prescriptions; must live in or near this district. Richards, Chemist, 59 Dudden Hill Lane, Willesden, N.W.

A SSISTANT for the Dispensing Counter; must be accurate and reliable; two kept; hours good; lovely country district; inor out-doors. Hart, Ross.

A SSISTANT, accustomed to high-class Dispensing and Window-dressing; near Manchester. Apply, stating full particulars, salary, etc., to Jacklin, Hale, Cheshire.

A SSISTANT, lady or gent, wanted shortly; Light Retail and Dispensing; outdoors. Send full particulars, Smith, Chemist, Rushden, Northants.

A SSISTANT wanted, accustomed to good-class Dispensing business; indoors. Apply, stating salary and usual particulars, to J. Selby, 202 Earls Court Road, South Kensington.

A SSISTANT wanted; unqualified; good Dispenser. Please send references and full particulars in first letter, with photo if convenient, Grant, Pharmacist, Rock Ferry, Birkenhead.

CAPABLE unqualified Assistant wanted at once in Dispensing business; outdoors. Apply, with full particulars of experience, stating salary required, and if convenient enclosing photo, to A. E. Hobbs, 35 Mount Pleasant, Tunbridge Wells.

CLERK wanted in Retail Chemist's establishment; good writer.
Apply, "Ajax," c/o Maw, Son & Sons, 7-12 Aldersgate
Street, E.C.

COMPETENT Pharmacist, with good all-round experience, as Manager by Store Ohemists. Please send full particulars of experience, stating age and salary required, 42/34, Office of this Paper.

DISPENSERS (qualified).—Two required at once. Apply, personally or by letter, stating full particulars of experience, to Staff Superintendent, Harrod's, Ltd., 44 Hans Crescent, S.W.

RLDERLY qualified Assistant required for the Midlands; post can be arranged for supervision only or to work certain hours of the day. 40/38, Office of this Paper.

ELDERLY or retired Pharmacist (qualified) wanted to relieve principal in good-class Country business on South Coast for 5 or 6 hours daily; assistant kept; permanency; Locums need not apply. Full particulars, with salary required and references, "Ajax" (42/38), Office of this Paper.

GENTLEMANLY Assistant of good character required in goodclass business; middle-aged man not objected to. Full particulars to Kemp, Chorlton-cum-Hardy, Manchester.

MMEDIATE.—Assistant, qualified or unqualified, aged 22 to 24, with good experience in Dispensing, required in good-class business; Junior employed also. Please give particulars of experience and state salary required in first letter to John Hawes, 37 St. James's Square, Bath.

IMPROVER wanted; ontdoors; time for study; no Sunday duty. State age, salary, etc. (also temporary Help for evenings), McCabe, Church Street, Croydon.

JUNIOR wanted (outdoors), 20 to 23. State salary required and usual particulars, W. Roberts, Chemist, 73 Brook Street, Chester.

JUNIOR wanted, about beginning of May, for good-class business; knowledge of Photographic business preferred; indoors or out. Give full particulars and references and state salary required, A. G. Reid, Petersheld, Hants.

JUNIOR Assistant for good-class Retail and Photographic business. Apply, with full particulars of experience, age, and salary required (in or out-doors), to Righton, Chemist, Havant, Hants.

JUNIOR Assistant, either in- or out-doors, for a high-class Retail and Dispensing business; three Assistants kept. W. Adams, Pharmaceutical Chemist, Shrewsbury.

JUNIOR or Second Assistant wanted in good-class business; all-round experience to be gained; easy hours; indoors or out; good position for capable and reliable person. Nicholls, Pharmacist, Chelmsford.

JUNIOR Assistant wanted, or Improver; Welsh preferred; Photographic; indoors. State age, salary, etc. (time to read), Williams, Barmouth.

JUNIOR or Improver wanted in good-class business; outdoors. Full particulars to Rushton, Chemist, Hall Green, Birmingham.

JUNIOR Assistant (outdoors) for good-class business. Apply, stating full particulars, salary required, etc., enclose photo if convenient, D. T. Davies, 567 Finchley Road, Hampstead, London, N.W.

JUNIOR Assistant immediately for good-class business situated in a populous town in the Midlands. Apply, with full particulars in first letter, stating age, experience, and salary required, 42/034, Office of this Paper.

JUNIOR; qualified or unqualified; reasonable hours; some Wholesale experience an advantage. Apply Heppell & Co., 38 Chandos Street, Charing Cross, W.C.

JUNIOR for Dispensing business; one with knowledge of Photography preferred; two kept. Apply, with full particulars, J. Parrott, Richmond Hill, Surrey.

LADY Assistant for a high-class Pharmacy, any time in May; must be experienced Dispenser; Hall or Minor qualification; age about 25. Please give full particulars of experience and salary expected to Wilson, Pharmacist, Dorking.

LADY Assistant for Counter and Dispensing; easy hours; no Sunday duty. State salary required, and send references and usual particulars to 44/33, Office of this Paper.

LEWIS & BURROWS have a vacancy for a competent unregistered Assistant; would suit middle-aged man. Apply, 146 Holborn Bars, E.C.

LOCUM, qualified, required from July 5 to 31 inclusive. Apply, with full particulars, to Manager, Chemist Department, Cooperative Society, Ltd., Doncaster.

MANAGER for small Country business; suit elderly man; married; qualification not essential; comfortable situation and house. 44/18, Office of this Paper.

MESSRS. CADRONES & CO., Chemists, 4 Queen's Road, Bayswater, require immediately the services of a trustworthy unqualified Junior Assistant, age about 23, for a Light Dispensing and Retail business; hours 8.30 till 8.30; half-holiday weekly; alternate Sunday duty.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist as Manager; easy hours; good and progressive salary, with excellent prospects.

MIDDLE-AGED Manager wanted immediately for small Branch; live over premises. Apply, giving full particulars in first letter, to W. E. Giles & Son, 110 Commercial Road, Newport, Mon.

MINOR.—Required, an Assistant, about 25 years of age, holding the Minor qualification; hours of business 9-6, Saturday 1 o'clock. Apply, enclosing photograph (to be returned), and stating salary required, to 78/68, Office of this Paper.

MR. CHURCH, Pharmaceutical Chemist, St. Andrew's Street, Cambridge, requires a reliable and trustworthy Assistant.

NEAR Schools.—Gentleman required, with good experience, to assist with Dispensing, Stock, Solutions, and Books, from 2 o'clock daily, in high-class private medical practice; comfortable berth; suit Minor student attending morning lectures; alternate Sundays (nominal duty only). Apply to Mr. Hughes, 20 Streatham Hill, London, S.W.

PART-TIME; suit student; good experience necessary. Tate, 7 Belgrave Mansions, Victoria, S.W.

QUALIFIED.—Young qualified Assistant wanted; Dispensing (good class); easy position; comfortable home. References, carte de visite, and salary asked to Edward Maish, Cotham Brow, Bristol.

QUALIFIED Assistant required for good Family business in a busy market town; permanency with excellent prospects of advancement. "Ford" (430/14), Office of this Paper.

QUALIFIED Manager required immediately for Branch business. Please give full particulars as to salary required, etc., E. Murray Carruthers, Chemist, 31 St. John's Street, Bedford.

QUALIFIED Assistant required; indoors; abstainer; elderly man not objected to. Percy Browa, Ltd., 186 Mare Street,

QUALIFIED Assistant, with good experience, desires position in West End or City; speaks French and has Continental experience. 46/29, Office of this Paper.

QUALIFIED Junior, accustomed to good-class Dispensing; previous London experience not essential. Please give particulars to "Carboy," Maw, Son & Sons, 7-12 Aldersgate Strect, E.C.

RELIABLE, qualified Assistant; able to take charge occasionally. W. Shadforth, Pharmaceutical Chemist, 63 Grove Road, Bow, London, E.

REQUIRED by the Swansea Insurance Committée, a Dispenser (lady or gentleman) to Check Prescriptions; salary £100 per annum. Particulars of experience, etc., accompanied by two testimonials, to reach the Clerk not later than May 8. S. E. Thomas, 18 Castle Street, Swansca.

REQUIRED immediately.—Qualified male Dispenser, unmarried, for Military Hospital (56 beds); must live in. Apply, Officer-in-charge, Military Hospital, Ipswich, giving full particulars; pay 6s. a day and rations; healthy spot, near Ipswich.

S ECOND Week in May.—Unqualified indoor Assistant, competent Dispenser, with knowledge of Photography and General Retail; comfortable home. Fullest particulars to Pelham Young, Pharmaeist, Hounslow, W. Telephone, 153 Hounslow.

MART unqualified Assistant required to travel Birmingham and district for firm manufacturing and packing cheap lines; occasional indoor duty (about one day a fortnight); good Salesman; sound prospects to intelligent and industrious man. Full particulars as to age, experience, and salary in first letter, Gibson, Manufacturing Chemists, Gooch Street, Birmingham.

TEMPORARY Assistant, unqualified, required for two months in high-class Retail and Dispensing business; board indoors and sleep out. Apply, stating salary required and usual particulars, to Woollings, Chemist, Sandown, Isle of Wight.

THE Coventry Insurance Committee invite applications for the post of Prescriptions Clerk; candidates must have had experience in Prescription Reading and in Accounting; salary at rate of £78 per annum. Written application to be made not later than April 30, stating age, qualifications, and any other information, addressed to the Clerk, Coventry Insurance Committee, Grey Friers Chambers, Hertford Street, Coventry. Letters to be marked "Clerkship."

TO Gentlemen studying for the Examination, comfortable homo offered for Part-time. 175 Uxbridge Road, London, W.

UNQUALIFIED; age about 25; Counter and Dispensing, including N.H.I.; good-class business. State salary required and experience, Vince, Pharmacist, Lancaster.

UNQUALIFIED Senior Assistant of good appearance and address required for a brisk business situate in the West Riding of Yorkshire; hours not excessive; salary £2 2s. per week. "Field" (403/14), Office of this Paper.

UNQUALIFIED Junior or Lady Assistant in Light Retail and Dispensing business; no Photography; healthy town; no Sunday or after business duty. State age, salary required, references, capabilities, and other usual particulars, with photograph if convenient, to J. H. Herington, Pharmacist, Dunstable, Beds.

UNQUALIFIED Assistant; time for study if required. Fullest particulars to Druce & Co., Chemists, Oxford.

UNQUALIFIED Assistant or Junior for good-class Retail and Dispensing business; knowieuge of Photography preferred; short hours and no Sunday duty; good salary to competent man. Full particulars to Tavener, Pharmacist, Guildford.

UNQUALIFIED Assistant wanted; outdoors; short hours. Apply, stating age, salary required, and references, to Stearn Bros., Stowmarket.

UNQUALIFIED Assistant wanted at once; must be good Salesman and Window-dresser, and have a knowledge of Photography; salary and commission. Apply, stating fullest particulars, to 42/23, Office of this Paper.

WANTED, Assistants (outdoors). Apply, stating age, experience, and salary required, to L. Cameron, Pharmaceutical Chemist, Broad Street, Scaford, Sussex.

WANTED, reliable Junior for high-class Dispensing and Family business; outdoors; two kept. State references, age, salary required, and all particulars, J. B. Pater, Pharmacist, Broomhill, Sheffield.

WANTED at once, Assistant; male or female. Write full particulars to 41/22, Office of this Paper.

WANTED immediately, qualified, quick Dispenser and Counterman; state age and salary. Send references to W. H. Corns, 42 Dudley Road, Wolverhampton.

WANTED on May 3, qualified Assistant, capable of taking charge for a few weeks (indoors). Write, giving full particulars, to W. Harris Jones, Pharmaceutical Chemist, Malvern.

WANTED, for May 1, smart Junior or Improver for Scaside branch; moderate hours; used to N.H.I. Dispensing. Send particulars of age, experience, references, etc., to Walker Litarris, Ltd., Canterbury.

WANTED, a Junior Assistant, accustomed to a Mixed Country business; indoors. Apply D. Davies, Castle Pharmacy, Pembroke.

WANTED, a qualified man-for small Lancashire Manufacturing town; to live out; good Counterman; used to Insurance Dispensing; must be steady and obliging. State age and salary required, 44/19, Office of this Paper.

Winted at once.—A good Junior; must be a good Stockkeeper and used to a brisk Counter trade; easy hours; no Sunday duty. Apply, stating salary required, giving reference, to H. Clarke, 31 High Street, Chelmsford.

WANTED, smart Junior; comfortable berth; good references required. Particulars, Maunder, Chemist, Teignmouth.

WANTED, permanent Assistant as Traveller and to assist in shop; indoors; salary and commission; good opportunity. Apply, with full particulars, Eardley & Furnival, Pharmaccurreal Chemists, 265 Glossop Road, Sheffield.

WANTED at once, Assistant or Locum in good-class Dispensing and Retail; Lady Pharmacists entertained. Bell, The Strand, Southsea.

WANTED, qualified Assistant, experienced and good Salesman, to sleep indoors; separate sitting-room; board out. Apply, if by letter enclose photo (to be returned), or personally, to R. S. Starkie, 126 Strand.

WANTED, an unqualified Assistant. State age, salary required (outdoors), Clare & Hunt, Scarborough.

35/- Week offered capable industrious man as reliable Stock-keeper, Dispenser, Second hand; permanency; working class business, Cardiff. 44/28, Office of this Paper.

40/- PER WEEK.—Assistant wanted for Counter, Window-dressing, etc. State age, experience, references, and when disengaged in first letter, or apply personally, to Bishop & Vincent, 460 Holloway Road, London, N.

45/- a Week.—Unqualified Assistants, with good Counter and Dispensing experience, Allen & Lloyd, Aldershot.

WHOLESALE.

Price-lists, trade circulars, samples, and printed matter can it as case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

NORTH OF ENGLAND.—A smart Salesman, young and energetio, required by leading Loudon Perfumery and Toilet house; excellent prospects for keen man. Full particulars to 39/39, Office of this Paper.

SOUTH COAST.—Wet Counterman required; experienced; permanency if suitable. Please state age, salary expected, etc., Timothy White Co., Ltd., Portsmouth.

SOUTH COAST,—Dry Counterman required; experienced; permanence if suitable. Please state age, salary expected, etc., Timothy White Co., Ltd., Portsmouth.

A FIRM of London Wholesale Chemists and Drugg'sts require someone to get out their Catalogue, Circulars, etc.; must have some knowledge of Printing and Advortising. Apply, stating experience and salary required, to 76/22, Office of this Paper.

CAPABLE qualified Assistant required in Wholesale Department of large high-class firm of Chemists in the Provinces; would be required for Testing Drugs and Laboratory Preparations, and for Experimental work. Mention age, salary desired, and customary information. "S. J." (41/3), Office of this Paper.

CHEMICAL hand, with experience in the manufacture of Medicinal Chemicals, wanted; wages 45s. Apply, 61/16, office of this Paper.

EXPERIENCED Traveller required for London immediately; intimate knowledge of first-class Chemists' requirements essential; must be well-educated gentlemau of good address. Apply, with full particulars, to R. J. Reuter, Dealer and Manufacturer of Chemists' Sundries, 5, 6, and 7 Denman Street, Piccadilly Circus, London, W.

EXPERIENCED Pillmaker wanted by London firm. Write, stating previous experience and wage required, to 77/065, Office of this Paper.

POREWOMAN, experienced, wanted at once for supervision of Perfumery Department; Wet and Dry; able to manage and control staff of girls; state salary and previous experience. Apply, by letter only, to Henry C. Quelch & Co., 4 Ludgate Square, London, E.C.

JUNIOR Invoice Clerk required; one used to Typewriting preferred. Apply, Meggeson & Co., Ltd., 14 & 15 Miles Lane, Upper Thames Street, E.C.

ABORATORY Manager wanted; must be fully qualified, a hard worker, good organiser, and capable of looking after a staff; previous experience in a similar post essential. Please apply, with full particulars in first letter, to Oldfield, Pattinson & Co., New Bridge Street, Manchester.

LABORATORY Assistant for preparation of Ointments, Syrups, etc., required by London firm. State wages and past experience to "Z" (78/64), Office of this Paper.

PACKER required at once for London Wholesale Drug House; provious experience absolutely necessary. Apply, giving full particulars and salary required, to "Packer" (77/70), Office of this Paper.

PERFUMERY and Toilet Sundry house require first-class commission Traveller for Wales and South-West England. Give fullest particulars, 44/40, Office of this Paper.

QUALIFIED Chemist wanted by London Manufacturing firm; age 25-50; previous experience in Wholesale not actually necessary. Write, stating salary required and provious experience, to 77/65, Cffice of this Paper.

PEPRESENTATIVE, young, enthusiastic, and a worker, wanted; to one who knows Northern Counties of England and Wales, to call upon Chemists for a Packed Goods and Speciality house; moderate salary to commence with expenses and commission. "Pep." (69/7), Office of this Paper.

TABLET Makers and good Granulators wanted by London firm.
Write, stating previous experience and wage required, to 77/650, Office of this Paper.

WANTED for Wholesale Druggists in Liverpool, an Invoice Clerk. Apply, "Saiol," Box 73, Liverpool.

WANTED, Checkers for Wholesale Druggists' Despatch Counters. State age, experience, wages expected, etc., to Goodall, Backhouse & Co., Leeds.

WANTED, at Cambridge, a single-handed private Laboratory Assistant, unfit for military service, with knowledge of Chemical Technique (organio) and Section Cutting, and, if possible, capable of small Laboratory repairs. Write, L. A., Box 15, c/o May & Williams, 160 Piccadilly, W.

WET-ROOM Assistants and Wet-room Counter hands wanted by Raimes & Co., Wholesale Druggists, York. Apply, with full particulars, references, salary required.

WET Floor Counter hand required at once; home and export. Apply in first instance, giving full particulars and salary required, to "X. Y. Z." (77/070), Office of this Paper.

WET or Dry hands wanted, with some experience; age 18-20. Apply, stating full particulars of age, experience, and wages expected, to 46/1, Office of this Paper.

YOUNG man accustomed to putting up Chemist's Wholesale Orders; good Stockkeeper; knowledge of Sundries and Patents essential, Apply, Heppell & Co., 38 Chandos Street, Charing Cross, W.C.

SITUATIONS OPEN.

(Colonial, Indian and Foreign.)

3s. 6d. for 50 words or less; 3d. for every 10 words or less beyond, prepaid. The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

BRITISH WEST INDIES.—Fully qualified Manager for Chemist's and Druggist's business; age 30-35. Write full particulars of experience to "Son," 16 Mark Lauc, London, E.C.

INDIA.—Old-established privato firm require smart, pushing Assistant with Minor qualification; salary commencing £18 per month, with annual increase of £2 per month; four years' agreement; second-class passage out and home; excellent prespects for a man not afraid of work; also Assistant required for Surgical Department; must have had first-class experience and possess a thorough knowledge of the business; terms on application Apply, "F. T. G. F.," Evans Sons Lescher & Webb, Ltd., 60 Bartholomew Close, E.C.

WANTED for South Africa, qualified Chemist with good Optical knowledge, capable of Sight Testing and doing practical Grinding and Fitting of Rimless work, etc.; age about 25 to 30; salary \$20 per manth and commission; splendid opportunity for competent man; boautiful, healthy seasido place. Apply, in first instance, to E. R. Dixon, Chemist, Lincoln.

SITUATIONS WANTED.

is. for 12 words or less; 6d. for every 10 words 03 less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of GG.

[HOME.] RETAIL.

AS Manager; M.P.S.; 29; permanency with good prospects; disongaged May 12 "Experienced" (41/18), Office of this Paper.

A SSISTANT, 27, requires berth shortly; unqualified; good Dispensing experience; short hours; permanency; Photography. "E.," 14 Broad Street, Brighton.

A SSISTANT, 25, competent, best experience, desires London post; highest references. Apply, 43/3, Office of this Paper.

A SSISTANT or Branch Manager; unqualified; capable; 30; Optical, Photography; good Dispensor; reasonable hours; 45s. per week; good worker. Address, 42/21, Office of this Paper.

A SSISTANT or Manager, with good all-round experience, Dispensing and Counter, desires permanency; South or South-West preferred; excellent references; married; shortly disengaged. "Unqualified" (44/20), Office of this Paper.

A T liberty, Sundays, Thursday evenings, and alternate Mondays; qualified; 36; terms 148. per day. "London" (43/27), Office of this Paper.

BIRMINGHAM District.—Assistant, unqualified, 21, Store and private experience, desires change; would manage Drug Stores. "Unguentum," 19 St. Silas' Square, Lozells, Birmingham.

CAPABLE Pharmaoist, 30 years' experience high-class modern business, Photography, seeks responsible post. 45/2, Office of this Paper.

DISPENSER, Looum, or Assistant; first-class experience. "Dispenser," 58 Malvern Road, West Kilburn.

DISPENSING required by lady; three nights per week; North London preferred. 40/32, Office of this Paper.

DOCTOR'S Dispenser-Bookkeeper; country practice preferred; age 35; good references; strictly temperate. 43/4, Office of this Paper.

PLDERLY gentleman, married, qualified, seeks position as Branch Manager; Eastern Counties preferred. Replies must state salary offered and usual details, to avoid useless correspondence, "Tabloid" (42/9), Office of this Paper.

EVENINGS.—Dispensing wanted; lady; qualified; experienced. "E. B.," 140 Green Lanes, Stoke Newington.

EVENINGS in W. or N.W. district. "Worker," 5 Gillingham Road, Cricklewood.

EVENINGS, except Saturday; alternate Sunday; qualified. "Jeff," 13 Hillfield Park, Muswell Hill.

EXCHANGE for Bedroom, etc.—Qualified man has spare time; 42; single; London. "Permanent" (45/34), Office of this

JUNIOR; 21; tall; good experience; disengaged. Morgans, 91 Llewellyn Street, Pentre, Glam.

ADY, 23, tall, requires position as Toilet or Perfumery Assistant; 4 years' experience; could Assist with Stock, Books, or at Drug Counter. Address, 40/39, Office of this Paper.

ADY Dispenser (Hall), experienced, desires Looum work during summer. Miller, Oakwood, Billingshurst.

ADY Dispenser desires re-engagement; Doctor or Chemist; experienced and all Secretarial work. 45/5, Office of this

ADY Dispenser (Hall) desires post; London; good Dispensing experience in East End. 43/29, Office of this Paper.

LADY, qualified, experienced, desires post, Doctor or Institution. 43/5, Office of this Paper.

ADY Dispenser requires post, either in Institute or Doetor's Surgery; 4½ years' experience in Hospital and Pharmacy; eapahle; good references. 42/40, Office of this Paper.

ADY, qualified, with good Dispensing experience, seeks Whole or Part Time situation in Bristol district; outdoors. Pleaso state hours and other particulars, 46/6, Office of this Paper.

ADY Dispenser-Bookkeeper (Hall) seeks post; experienced; in or near London preferred. 43/7, Office of this Paper.

LOCUM or permanent; Assistantship; disongaged 24th. "B.,"
1 Oak Villa, Bitterne, Southampton.

LOCUM, now disengaged; fully experienced and quite trustworthy. "M.P.S.," 326 Uxbridge Road, W.

LOCUM, disengaged June, July, August; experienced all brauches; abstrainer; early applications desirable; good references. 41/15, Office of this Paper.

LOCUM, 30 years' wide experience, qualified, at liberty May 7 onwards. M. Smith (Manchester), Acting Dispenser, East Suffolk Hospital, Ipswich.

OCUM; unqualified; 39; disengaged; thoroughly reliable, trustworthy, and abstainer; highest references; £2 outdoors, 30s. indoors, and railway fare (would entertain permaneucy). "Salop" (39/40), Office of this Paper.

OCUM or temporary Manager; qualified; 23 years' first-class
Store and Disponsing experience; disengaged immediately.
"Aspirin," 47 Wolseley Avenue, Wimbledon Park, London.

L OCUM, qualified; well experienced in routine of Pharmacy and Drug Stores; good references; disengaged April 23. "N.," Ordnance Place, Shooter's Hill, Woolwich.

LOCUM; qualified; days, weeks; Chemist or Institution work; abstainer; excellent experience. "Metropolis" (46/28), Office of this Paper.

LOCUM, unqualified; experienced, reliable; total abstainer; few open dates; London only. "Statim" (46/20), Office of this Paper.

OCUM, qualified; experienced; 32; disongaged. "A.," 40 King's Road, Brighton.

M.P.S., 34, single, shortly disengaged, as Manager or Senior; excellent references; experienced in all branches; North Country preferred. 46/31, Office of this Paper.

MANAGER; qualified; first-class all-round West-End experience; would invest £250 in sound progressive business. "Salol" (45/30), Office of this Paper.

MINOR man; middle-aged; not in business recently; services in exchauge for living expenses; room at premises preferred; London or elsewhere; single. "Notice" (45/304), Office of this Paper.

ONE or three months; M.P.S. (elderly); sold business; energetie; abstainer; reference given and received; photo; easy hours; easy pay; pleasant locality. 59/9, Office of this Paper.

PART-TIME; W. or S.W.; Disponsing or Counter; experienced. 37/6, Office of this Paper.

PART-TIME.—Unqualified Assistant would exchange for comfortable bed-sitting room; abstainer. 46/7, Office of this Paper.

PHARMACEUTICAL Chemist, 55, active, sober, seeks position of trust. 43/8, Office of this Paper.

PHARMACIST; 35; married; no children; Manager; experience Seaside, Agrioultural, Dispensing, Continental; live at convenient promises; permanency; May 1. "Yorkshire," 6 The Traverse, Bury St. Edmunds.

QUALIFIED, competent, energetic, and trustworthy Dispenser, Manager, Loeum, or Senior Assistant (40), shortly d'sengaged; excellent references. Williams, 6 Paradise Square, Oxford.

QUALIFIED; 31: experienced; good testimonials; Mason; Liverpool or Manchester districts; permanency; Locum. 37/8, Office of this Paper.

QUALIFIED; 34; Manager, Dispenser; excellent all-round experience; trustworthy; disengaged. "Aspirin," 151 Bowe's Road, Palmer's Green, London.

QUALIFIED; few evenings a week; Dispensing, etc. Apply "Scnior," 31 Great St. Andrew Street, Shaftesbury Avenue,

SPIRIN

At considerable expense we fought for this Trade Mark, and ought to have the cooperation of the British Chemist.

We offer the 100 % article, guaranteed to contain no free Salicylic Acid, 5 gr. Tablets.

25's at 8/6 per dozen, minimum selling price, 1/-

50's ,, 16/-., 100's ,, 31/6 3/-

SPECIAL BONUS -with half-gross lots of ASPIRIN we will give one dozen (5/6) Keene's One Night Corn Cure, free. Carriage Paid, Chemist's Name on Cartons.

Above Offer is good for one week only. Order NOW! The price will go higher, as Pure Aspirin is almost unobtainable.

KEENE CO., 50 GRAY'S INN ROAD, LONDON,

QUALIFIED; 45; married; London preferred; permanency or Locum. 45/38, Office of this Paper.

S ENIOR Manager; 28; 6 ft.; unqualified; married; excellent West-End and Provincial experience and references. Evans, 25 Milton Road, Sharrow, Sheffield.

WHOLESALE.

Price-lists, trade circulars, samples, and printed matter can is so case be forwarded, the Rox numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

DRUG-GRINDING, Perfumery, Sundries.—Thoroughly experienced, seeks berth; capable Buyer, Stockkeeper; excellent references. 42/11, Office of this Paper.

EXPERIENCED Agent is open to push good lines on commission. Squire, 408 Uxbridge Road, W.

CENTLEMAN, having extensive connection in South of England, which he has worked for 9 years, desires to represent established firm, Drugs, Sundries, or Perfumery. 41/6, Office of this Paper.

MANAGER or Senior, qualified, age 30, desires a change; Dispensing, Surgical Instruments, Photographic, Truss and Belt Fitting; well up in Sundries; capable Buyer; Wholesale, Retail, and Manufacturing experience. State salary offered, "Ajax" (40/31), Office of this Paper.

REPRESENTATIVE, 35, qualified Chemist, up-to-date methods and business capacity, sound connection London and suburbs, desires to represent a good house. "Hustler" (44/37), Office of this Paper.

£200 PER ANNUM.—Representative desires change, Drug and Sundries; young, enthusiastic, and experienced worker. Particulars of ground previously worked on application (interview arranged). "Business" (39/8), Office of this raper.

Please Try Our DISPENSING BOTTLES & PHIALS.

We send six gross asserted or otherwise, carriage paid to certain stations, paraculars on application. Smaller quantities not carriage paid.

 carriage paid.

 REDUCED PRICES.

 Clear Blue Tinted—Good Quality.

 3 & 4 6 6 8 12 16 0z. Plain or graduated, round edges.

 8/6 9/6 14/- 18/- per gross.

Clear Blue Tinted. Best Quality. QUININE.

3 & 4 & 6 & 8 & 12 & 16 oz. Plain or graduated, round edges.

10/6 & 11/6 & 16/- & 20/- per gross.

CHEAP BOTTLES for disponsing.

3 & 4 6 8 oz. Plain or graduated, round edges.

8/- 9/- per gross.

 WHITE PHIALS—GOOD QUALITY.

 1/2
 1
 1½
 2 oz. Plain or teaspoons

 4/ 4/6
 4/9
 5/3 per gross.

1. ISAACS & CO.,

106 MIDLAND ROAD, ST. PANCRAS, LOND' N.W.
or ISLINGTON BOTTLE COMPANY, 7 New Inn Yard, Tottenham Court Road, London, W.

Orders sent to either establishment have attention.
Established 100 Years.

WAR WANTS EXCHANGE

pharmaceutical products which are scarce at present owing to the War, and which the inquirers have failed to obtain through the sustomary business channels.

TERMS

Minimum charge (including registration fee) of 1/for six words or less; 2d. per word beyond, prepaid. Inquiries are inserted with a registration number attached to each item, and replies will be communicated direct to the inquirers by the Information Department of "THE CHEMIST AND DRUGGIST."

WANTED.

Principals having any of the following articles to dispose of are requested to notify the fact by postcard or otherwise stating quantity and price to

THE WAR WANTS EXCHANGE,

"The Chemist and Druggist," 42 Cannon Street, London, E.C.

Aceto-salicylic acid (77/52) Adalin tablets (44/5) Agurin (77/52)

Eucaine (77/52) Peptone (77/52) Phenazone (77/52)

FOR DISPOSAL.

Bona-fide buyers of the following articles are requested to communicate their exact requirements promptly to us, and we shall place them in touch with eellers :-

Santonine, 4 oz. (or exchange for salicylic acid

or sodium salicylate) (41/2)

MISCELLANEOUS.

S HOPFITTINGS (Second-hand).—12-ft. Plate-glass fronted and solid Mahogany Counter, £8 10s.; 10-ft. ditto, £7 5s.; Perfumery Case and Desk, mirror box, glass shelves, solid Mahogany, 57s. 6d.; 6-ft. Mahogany and Bent Plate-glass Counter Case, 92s. 6d.; other bargains. Philip Josephs & Sons, Ltd., 93 Old Street, E.C.

S ECOND-HAND Chemist's Fittings.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 ld Street, London, E.C.

CHEMISTS' Shopfittings.—Silent Salesman, Showcases, Window-enclosures, Dispensing-screens, Drug-fittings, Wallcases, Glassfront Counters, Counter Drawers, etc., at lowest prices; shopsoiled second-hand; 30 years fitting pharmacies; you will save time and money by sending your requirements to George Cook, The Chemists' Working Shopfitter, Catherine Street, City Road, Old Street, London.

EXCHANGE COLUMN

One halipenny per word with name and address. One penny per word if we register the address and attach a number. Ne advertisement inserted for less than 6d.

Prioe-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communics tions received which he may consider contrary to this rule.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

YEAR-BOOKS, 1901 to 1909, of Pharmacy and Transactions of the Brit. Phar. Conference; what offer? H. B., 81 Finsbury Park Road, Finsbury Park.

DRUGS AND CHEMICALS.

WHITE dextrin, 16s. cwt.; yellow dextrin, 14s. cwt., f.o.r. Critchley, Blackburn.

HYDRARG, perchlor. 8 lb.; sodii salicylas, flake, 4 lb.; what offers? Tween, Bushey.

4 OZ. morphin. hydrochlor., 48s.; 1 oz. diuretin, Knoll, 3s. 6d. Payne, Chemist, Thrapston.

7 LB. German sedium salicylate, physiologically pure, 15s. per lb., carriage paid. Williamson, Pharmacist, Congleton.

FOUR 1-dr. bottles atropinæ sulph., May, Baker; 3-oz. ditto, Merck;

offers. Cleave, Chemist, Notting Hill Gate, London.

P. SOD. salicylate, 11s. lb., 4 lb. 10s. 10d., 7 lb. 10s. 8d. cash, carriage paid. Wilson, Chemist, 741 Barking Road, Plaistow,

CONCENTRATED essences for producing perfumes; approx. 13 lb.; 20 varieties; cost 5s. 8d. per oz.; will sell cheap; offers whole or part; list 1d. stamp. Teale, 19 Hessle Terrace, Hyde Park, Leeds.

OPTICAL AND PHOTOGRAPHIC.

1,500 MOUNTS; 1 pl. paste on, 2 pl. cabinet, and 1 pl. assorted; list sent, or offer for lot received; original cost £3 78. 6d. Sewell, Chemist, Goole.

SHOP FITTINGS.

CHEAP; 2 specie jars, blue and gold. Cassie & Co., 49 Newgate Street, E.C.

PROPRIETARY ARTICLES.

HOMMEL'S H. Ring Hæmatogen, 2s. 9d. size, unstamped, new condition, 10s. 6d. dozen. Holt Green, South Kensington.

MISCELLANEOUS.

OVER 200 Zd. Diamond dyes, saleable, 18s.; 3-lb. dyes, assorted eolours, offer wanted as no sale for them. Donnelly, 284 Derby Street, Bolton.

SOUTHALL'S Minor set botany slides, quite new; White's "Phar-macopedia"; Greenish's "Materia Medica"; Dallinger's macopedia"; Greenish's "Microscope and its Revelations," 30s. edition; several Wills' books and others; prices and full list sent. Baxter, Chemist, Bramley, Leeds.

WANTED.

AMERICAN soda fountain wanted; state lowest. 40/2, Office of this Paper. LENS, No. 2a Aldis, f6.3 and trio in compound shutter. 2/24,

Office of this Paper. BOTTLES, about ½ an ounce. Send sample, and price, "Esiw"

(45/9), Office of this Paper.

OPTICAL trial case, complete with trial frame. State particulars, Gilman, Chemist, Beswick, Manchester.

OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. Gower, Bookseller, 41 Voltaire Road, Clapham, London, S.W.

MICROSCOPE, triple nose-piece, three objectives, one $\frac{1}{12}$ oil-immersion Abbé condenser; Bausch & Lomb preferred. Rush-

ton, Chemist, Hall Green, Birmingham. HALF retail price given for watch-pocket carbines, vest-pocket

Kodaks, and other small folding cameras; full price given for stereo prism binoculars; cash by return. Watsons, 84 High Street, Sheffiold.

Prescription Problem.

THE exercise which was set in the C. & D., March 6 (Coloured Supplement), brought a good response. The difficulties were chiefly in the directions, which at best required for their interpretation the exercise of the imagination. The transcription is as follows:

R Tr. opii 3ss Ammon. carb. 388 Sp. chlorof. 3j Aq 3vj

ft mist. sixth ter die

Several competitors were able to read vin. opii for the first ingredient, and a few gave it as sodium bicarbonate, hrst ingredient, and a few gave it as sodium bicarbonate, deduced from a fancied resemblance of the first words to "Na bic." Sp. chlorof. was read as tr. chlorof. by other subscribers. As we have already stated, the crux of the problem was in the directions: Correct readings were sent in by Mr. W. J. Nethercott, Grosvenor Pharmacy, Bristol, and Mr. C. S. Purdy, 106 Welldon Crescent, Harrow. To each of these we award a copy of "Minor Experiences" or any one of our Chemists' Dictionaries, which they ask us for. The following prescription forms the subject of the next competition. Postcards only are permissible, and these should be Postcards only are permissible, and these should be posted not later than April 30. A copy of Wootton's "Chronicles of Pharmacy" will be awarded at the discretion of the Editor, and in case-of close competition the time of posting will be taken into account:

> y arrabally In Mah. Sin.

Belgian Doctors' and Pharmacists' Relief Fund.

MEETING of the Executive Committee was held on April 15, when the Treasurer, Dr. Des Voeux, reported upon the financial position of the fund and presented an audited statement of account up to March 31 last, given below: RECEIPTS.

Donations Loan Repaid Donations received from	 	 						s. 1 0	d. 2 0 2 0
Donations received from	Mai	ren ors	U 00 21	Pili	14011	•••	1,000	10	
PAYMENTS,									
								8.	d.
Relief							964	10	U
Loans to be Repaid								6	0
Drugs Purchased							245		2
Clothes Purchased			*	4	****			18	0
Administration Expens	es							16	3
Cash at Bank		*1.	• • • •		£266	9 0			
On Deposit ·			•••	•••	6,500	0 0			
					26,766	9 0			
Less due to Treasurer	•••						6,764	6	9
-							£8,109	1	2.
Relief since March 31s	t				*		14	0	0
Clothes							7	16	6
01001100									

It will be remembered that at the meeting of the Executive Committee held on March 25 it was unani-

mously agreed to send a substantial amount at once to Belgium to meet the urgent needs of Belgian doctors and pharmacists remaining in their own country. This course was adopted after the Committee had received detailed information as to cases and as to the machinery for distribution which had been adopted by the Aide et Protection aux Médecins et Pharmaciens Sinistrés. A representative of this body attended the meeting of the Committee. The money was despatched immediately to Belgium through the medium of certain banks, and an eloquent letter of thanks has been received from Dr. Pechère, the Chairman of the Aide et Protection aux Médecins et Pharmaciens Sinistrés. The Executive Committee proposes to continue their large and definite scheme of expenditure if the course is justified by reports received from Dr. Pechère as to the employment of the money.

The subscriptions received from pharmacists up to

Tuesday evening are as follows:

"For a Belgian chemist's little girl, from Betty Mortimer, an English chemist's little girl," 5s.; W. F. Beeny, 1l.; N. H. Martin, 5l. 5s.; Professor H. G. Greenish, 5l.; Notts County Pharmacists' Association (per A. H. Bell), 21, 2s.; collected by Birmingham Pharmaceutical Association (per F. Smith), F. W. Smallwood, 1l. 1s. Collected by the Manchester Pharmaceutical Association (per T. Miller): J. Boor, 10s. 6d.; J. E. R. Holman, 10s. 6d.; A. Marsland, 10s.; A. Hershberg, 5s.; J. C. Kidd, 5s.; M. Matz, 5s.; S. Matz, 5s.; W. J. Cooling, 2s. 6d.; G. Wilkinson, 28.

Subscriptions may be sent to Mr. W. J. Uglow

Woolcock, 16 Bloomsbury Square, London, W.C.

From Enemy Countries.

VIENNA CHEMICAL INSTITUTE.—The new building for the second Chemical University Institute in Vienna has just been completed. It has been built next to the first Chemical Institute. It is three storeys high, and has space for 500

War Losses.—The "Pharmazeutische Zeitung" publishes a list of pharmacists who have been killed in the war during the first quarter of 1915. This list brings up the total fatalities as follows: Military pharmacists, 7; pharmacists and pharmaceutical students, 174.

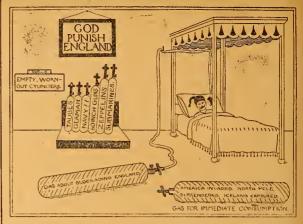
PRUSSIAN NITRATE SHORTAGE.—The Prussian Minister of Agriculture is offering prizes of 3,000m., 2,000m., and 1,000m. for the best ossays on substitutes for Chilian nitrate as a manure, and a prize of 10,000m. for the best suggestion on how to use the substitute, which is to be something in the way of nitrolim.

CLYSTEIN AND SAMPERDE.—The Kriggschemikalien Altien

in the way of nitrolin.

GLYCERIN AND SALTFETRE.—The Kriegschemikalien Aktiengesellschaft has asked all pharmaceutical associations to warn their members not to sell glycerin and saltpetre otherwise than upon a physician's prescription. In case of further offences against this regulation the Kriegschemikalien Aktiengesellschaft will be obliged to commandeer all stocks of these substances in pharmacies, and to issue an absolute prohibition of sale.

Sohimmel & Co., Militiz, near Leipzic, paid 7½ per cent. in 1913, and have passed their dividend for 1914. Their "Bericht" for October 1914 and April 1915 has just been issued. In it they state that the principal motive for not publishing report last October was that every publication of the kind immediately finds its way into the hostile professional Press, and it is not at all in the interest of this branch of German industry that the enemy should know all about the influence of the war upon manufacture, existing stocks, difficulties in supplying raw material, etc. Communications of the kind would certainly meet with a ready welcome in hostile countries, which would take their measures conformable to such communications in this economic war. The firm Schimmel & Co. thinks it very imprudent to publish commercial reports in the present circumstances and even expresses the wish to avoid as much as nossible war. The firm Schimmel & Co. thinks it very imprudent to publish commercial reports in the present circumstances and even expresses the wish to avoid as much as possible also after peace is made publication of the results of investigations about the influence of the war upon Germany industry and trade. In order to avoid further accumulation of news items, the firm decided to publish the scientific part of its report, but to be silent on commercial subjects. The scientific part is of the usual character. Researches have been made on the officacy of various essential oils for have been made on the efficacy of various essential oils for combating vermin. It has been found by chance that anisol the methyl ether of carbolic acid, C₆H₅OCH₃, is very good for this purpose, and Schimmel & Co, have undertaken the manufacture of it.



Wilhelm in Extremis.

The above sketch is redrawn from a design by Mr. J. Linthorn, assistant with H. W. Neathercoat, pharmacist, 60 Denmark Hill, London, S.E., entitled "Keeping the Kaiser Alive." Our staff poet writes:

What can a worried War-Lord do
To keep the "frightful" approbation Of his subservient Hunnic crew But soak his system through and through With artificial stimulation?

The Taube cylinders are burst; The Zeppclins have come a cropper; The Navy has a Kiel-bound thirst For gore, and at the very worst It may pop out-and catch it proper.

But now the gentle Kaiser lacks The gas to fitly follow after, Though U4's blow up fishing-smacks; The "Blockade" cylinder shows cracks, Emitting spurts of compressed laughter.

College Notes.

BATH COLLEGE OF PHARMACY.—At the recent terminal competitive examination the following awards were made: Silver Medal.—Mr. S. A. Webster. Bronze Medals.—Theory: Miss Cecil B. Bourne; Practical: Messrs. R. Lloyd and S. Norris. Certificates of Merit.—Chemistry: Miss C. B. Bourne, Messrs. E. W. James, F. Mildren, S. Norris, S. A. Webster, and S. T. Wilde. Pharmacy: Miss C. B. Bourne, Messrs. R. Lloyd, F. Mildren, S. Norris, S. A. Webster, and S. T. Wilde. Materia Medica: Miss C. B. Bourne, Messrs. F. Mildren, S. Norris, S. A. Webster, and S. T. Wilde. Botany: Miss C. B. Bourne, Messrs. R. Lloyd, S. Norris, S. A. Webster, and S. T. Wilde. Dispensing: Messrs. G. Aplin, A. F. Brown, E. W. James, R. Lloyd, F. Mildren, S. Norris, S. A. Webster, and S. T. Wilde. Practical Chemistry: Miss C. B. Bourne, Messrs. A. F. Brown, J. R. Jones, E. W. James, R. Lloyd, F. Mildren, S. Norris, W. C. Saint, S. A. Webster, and S. T. Wilde,

PARAGUAYAN PETITGRAIN OIL.—The British Consul, in his annual report on Paraguay for 1913-14, states that Paraguay is said to produce about '10 per cent. of the world's cutput of petitgrain oil. The total export amounted in 1913 to 32,351 kilos. (22,906 kilos. in 1912). Of the 1913 shipments, the following amounts were consigned: To France, 10,614 kilos.; Argentina, 11,677 kilos.; Italy, 3,800 kilos. But it is believed that much of it is re-exported to other destinations. For example, the amount consigned to Argentina no doubt includes a total of 7,630 kilos, which is known to have been forwarded to the United States. The price continues, to fall. The sour orange was planted extensively in Paraguay more than half a century ago by the Dictator Lopez. It thrives exceedingly, and is now found growing wild in some abundance throughout the country. The cil is manufactured by a number of small distilleries, some of is manufactured by a number of small distilleries, some of which are the property of their owners, while the majority belong to the chief exporters.

Australasian News.

"The Chemist and Druggist" is supplied weekly to all the members of nine Chemists' Societies in Australia and New

The Commonwealth.

B.P.—The British Pharmacopæia is to become official in Victoria in September. Tasmania has decided upon the date January 1, 1916. In Western Australia the B.P. was presumed to have become the legal standard on January 1, but the announcement has been made that full and ample time would be allowed for the necessary changes to be understood and effected. The B.P. 1914 is not to be used in the examinations of the Pharmacy Board of Queensland until January 1, 1916.

INSECT-POWDER AS A PRIZE.—Before the Melbourne Prize Court on February 24, thirty cases of insectpowder were brought for condemnation as a good and lawful prize. They had arrived by the s.s. Rygja, and seized at Port Meibourne. Mr. John Hagemann, Liverpool Buildings, Bourke Street, Melbourne, had received a bill of lading for the goods from Ertzgaard & Co., of Christiania, with a request for a remittance of 294. 16s. 6d., the value thereof. Hagemann declared that he did not know the firm Ertzgaard & Co., and had had no previous correspondence with them. He believed the goods were portion of some ordered by him before August 4 from one Riedel in Germany, and on September 12 he received a cable message from Christiania, reading "Riedel can re-begin shipments; make regular remit-tance; telegraph Ertzgaard." The correspondence from Riedel had been seized by the Censor, and gave a list of six or seven names of persons in Norway, Sweden, Denmark, Holland, Switzerland, and Italy—neutral countries—to whom correspondence might be directed. The invoice of the goods had come from Ertzgaard & Co., Christiania, and a letter had been received by this week's mail containing similar documents respecting the same goods from a firm in Milan, Italy. The ship on which the goods were forwarded was Norwegian—a neutral ship. Hagemann had given the authorities all the facts, and there was no suggestion that he was in any way concerned with the goods. He had assisted the authorities in every way. An order was made that notice of the writ should be served upon the Consul for Norway and also upon J. Hagemann.

Tasmania.

UNIFORM REGISTRATION-FEE. -At the meeting of the Pharmacy Board of Tasmania on February 18, a resolution was adopted that the Registrars of the other States be written to, asking for their opinion on the possibility of a uniform fee for all outsiders coming into the Commonwealth. The opinion was expressed that when once a man has obtained his footing in one State he should not have to pay more than his simple registration-fee in another.

Victoria.

CONDY'S CRYSTALS .- At the meeting of Pharmaceutice Defence, Ltd., on February 17, the Secretary reported that about fifty pharmacists had received letters from the solicitor for Condy & Mitchell, Ltd., on the alleged sale of permanganate of potash when Condy's crystals were asked for. In other cases complaint was made that pharmacists were acting illegally in labelling Condy's crystals "Poison." It was resolved to place the matter in the

hands of the company's solicitor.

Lysol Trade-Mark.—On January 19 application was made to the Commissioner of Patents, on behalf of Pearson's Antiseptic Co., to void the trade-mark Lysol. The Attorney-General has since granted the suspension in favour of the company subject to the following conditions, among others: The strength and purity of the lysol to be approved by the Commonwealth analyst; the price not to exceed the market price immediately prior price not to exceed the market price immediately prior to the war; a royalty (not exceeding 10 per cent.) to be paid on the net selling-price. The application of W. H. Boekemann, trading as J. L. Lennard, who was the former agent for the German lysol in Australia, and who applied for voidance in his favour, was refused.

Canadian News.

(From the "C. & D." Correspondent.)

CHAIN DRUG-STORES .- According to the "Retail Drug gist of Canada " the Riker-Hegeman Drug-stores, Ltd., is to extend its drug-stores to Canada. The company was originally incorporated in Canada with a capital of \$10,000, but no shops have been opened. On February 24 permission was given to increase the capital to \$815,000. The associated company in the United States owns about 100 stores.

MEDICINE STAMP-TAX.—The reduction in the amount of the war medicine stamp-tax which was promised by the Minister of Finance was given effect to when the Finance Bill came before the House of Commons. It was stated in the House that it was expected to raise \$255,000 from proprietary medicines and \$225,000 from perfumery and cosmetics. Dr. Schaffner, of Souris, pointed out that what were once called patent medicines are now kept in large quantities by druggists and prescribed by doctors. He asked whether such would be liable to a tax. The Finance Minister considered that they would be if the medicine were proprietary.

HABIT-FORMING DRUGS .- The "British Columbia Pharmaceutical Record," refers to an advertisement in "Tit-Bits" by Mr. W. Shadforth, 63 Grove Road, Bow, London, E., and quotes formulas for a catarrh-cream containing a hundredth of a grain of cocaine hydrochloride per oz., a voice-tablet with a twentieth of a grain of cocaine hydrochloride in each, and a lung-tonic containing 3² grains of morphine hydrochloride in 3 oz. The "Record" notes that these are offered to be sent by post, and says in view of the Province laws: "We are of the opinion that the authorities should prevent Mr. Shadforth offering to send broadcast preparations which we as pharmacists are not permitted to sell, and that his advertisement should be amended to confine his goods to the British Isles."

" Canadian Pharmaceutical WAR-SUPPLIES. — The Journal" for March has the following news item:

"A fortunate clerk is Mr. E. Powell, of the Carlton Drug "A fortunate clerk is Mr. E. Powell, of the Carlton Drug Co., Ottawa. The war brought a goodly grist to his door through the good offices of Mr. W. F. Garland, M.P., who, as manager of the store, turned over to him a matter of supplying some \$18,000 worth of dressing for the first Canadian Contingent. This order netted him the fidy little profit of \$3,600 on the lot, Baucr & Black handling the order. This is a snug little sum for an apprentice of a few months, and displays magnanimity on the part of Mr. Garland."

The sequel on April 15 placed the matter in rather a different light. Sir Robert Borden, the Premier, made a statement in the House of Commons regarding war-stores He censured Mr. Garland, member for Carlpurchases. ton, for aiding a young drug-clerk to make undue profits on the sale of hospital dressings. Restitution, he said, had been made of "the entire profit of \$6,000." A Commission to supervise all future purchases of war-supplies is to be appointed.

ONTARIO PHARMACY BILL.—The first reading of a Pharmacy Act Amendment Bill promoted by the Ontario College of Pharmacy took place in the House of Commons on March 10. The chief clause in the amendment Bill is

as follows:

No person or incorporated company shall sell by retail No person or incorporated company shall sell by retail carbolic acid above a 5-per-cent. solution, unless the same is, in addition to the provisions contained in Sub-section 1 of this section, put up and sold in a glass bottle of light-blue colour, having six sides, the front being of plain surface, upon which the label shall be placed, and the three opposite sides having blown on them the words "Carbolic acid," "Poison," "Use with caution," and prominent points on the other portion of the surface thereof in such a manner as to render the bottle distinguishable to the touch from ordinary bottles, and unless such other regulations are complied with as may be enacted by by-laws of the Council from time to time approved of by the Lieutenant-Governor in Council. Governor in Council.

Other clauses give power to increase the examination-fees, and to contribute to the Canadian Red Cross Asso-

Winter Session

of Meetings of Trade Associations.

(See also "Insurance Act Dispensing.")

Pharmacists' Association was held on April 19, Mr. G. N. Gutteridge (President) in the chair. The Secretary (Mr. R. J. H. Day), in his annual report, reviewed the events of the past year, and the report of the Treasurer (Mr. Heughan) was considered satisfactory. Both reports were adopted. The officers elected for the ensuing year are: President, Mr. S. N. Pickard (Ossett); Vice-Presidents, Messrs. W. Blakeley (Borstall) and F. Mallinson (Heckmondwike); Treasurer, Mr. G. Heughan (Dewsbury); Hon. Secretary, Mr. R. J. H. Day. A vote of thanks to the retiring President was carried unanimously. Mr. Pickard, the new President, is well known in the drug-trade, his reputation being national on account of his connection with the Proprietary Articles Trade Association and the Chemists' Defence Association. He is an active member in all local Associations connected with the trade.

Eastbourns. —A meeting of the Eastbourne Pharmacists' Association was held on April 13, Mr. G. A. Harmer (President) in the chair. Appreciation was expressed at the grant to discounted areas, and the Hon. Secretary was directed to write to the Society congratulating it upon the success of the deputation. Previous arrangements regarding the supply of medicines to Belgian refugees having automatically expired, fresh arrangements were made. It was proposed to issue prescriptionforms with the regulations to the Refugee Committee, and it was suggested that a list of necessitous refugees be supplied by the Committee to the doctors and pharmacists. The Secretary was further requested to write to the Secretary of the Proprietary Articles Trade Association emphasising the necessity of ensuring a minimum of 25 per cent. profit on all articles on the protected list.

Edinburgh.—The annual meeting of the Edinburgh Chemists', Assistants', and Apprentices' Association was held at 36 York Place, Edinburgh, on April 14, Mr. W. Lockerbie Thomson, B.Sc. (President), in the chair. The Hon. Secretary (Mr. Arthur Cairns) submitted the annual report, which indicated a successful session. The report by the Treasurer (Mr. J. J. Adamson) was agreed to, and a donation of 1l. 1s. voted to the Pharmaceutical Benevolent Fund. On the motion of Mr. J. Rutherford Hill, a cordial vote of thanks was awarded to the retiring office-bearers. The following were elected office-bearers for the next session: President, Mr. J. J. Adamson; Vice-President, Mr. A. A. W. Cuthbertson, Ph.C.; Secretary, Mr. Arthur Cairns, 16 Comely Bank Place, Edinburgh; Assistant Secretary, Mr. J. Eadie; Treasurer, Mr. David Murray; Committee, Messrs. McGill, Morpeth, Patullo, Robertson, Rowland, Smith, Stout, and Tait; Prize Committee, the President, Vice-President, Secretary, and Messrs. Murray, Stout, and Tait.

Harrow.—A meeting of the Harrow Pharmacists' Association was held at the Gayton Rooms on April 15. Members expressed themselves freely anent the non-payment of chemists' accounts. Disappointment was felt at the unavoidable absence of Mr. Woolcock, and it was decided to try to arrange a mass-meeting of Middlesex pharmacists to protest against the treatment to which chemists have been subjected. Sympathetic allusion was made to the death of Mr. R. L. Whigham, the first President of the Association, and a resolution of condolence with the deceased gentleman's relations was passed.

Huddersfield.—The Huddersfield Chemists' Association, at their monthly meeting on April 20, had an animated discussion on the question of the handling of proprietary articles. The subject was introduced by Mr. Cooper (the Secretary of the Association), who said that the present time, when high prices prevailed, was opportune for a discussion. Many of the proprietary articles on the market did not pay for the handling. This was a

question of national importance. He suggested the boycotting of proprietary articles which did not pay for handling and shop room. Mr. R. C. Walshaw said that if the Association wanted to do any good in this business they would have to start with the P.A.T.A. It had been suggested that they should advertise a price-list locally for patent medicines. If they did this they would simply drive customers into the drug-stores. If the Association attempted to regulate prices of patent medicines which were not on the P.A.T.A. list, they would soon have no Association left. He would be no party to a price-list of patent medicines unless the drug-stores fixed reasonable prices. Mr. Sykes said the solution of the difficulty would be found in chemists joining the P.A.T.A. If all were members they would get such a force behind them that would be paramount. The discussion was adjourned to a future meeting.

Hull.—A meeting of the Hull Pharmacists' Association was held on April 20 at the Grosvenor Hotel, Mr. I. W. Chapman (President) in the chair. Replies were received from the International Chemical Co., Ltd., and Dearborn, Ltd., regarding their methods of advertising to the public, to which the Association object. The replies were not considered satisfactory, and Mr. Richardson said he should bring the matter to the notice of the P.A.T.A. It was reported that 37l. 16s. had been collected by Mr. Robinson for the Belgian Doctors' and Pharmacists' Relief Fund, and a vote of thanks was accorded to Mr. Robinson for his services in this matter. A resolution was passed drawing the attention of the Pharmaceutical Society to the anomalies existing in the Tariff, especially in regard to the dispensing-fee on powders, etc. Complaint was made of the non-attendance at the meetings of the Association of the representatives on the Insurance Committee, and a resolution was passed that the business done by the Pharmaceutical Committee should be endorsed by the entire Association. On the question of dispensing-hours, Mr. Staning said a difficulty had arisen in East Hull, and owing to chemists closing doctors had been dispensing at the higher rates allowed to them. He had never opened on Sundays, but in case of emergency if he were on the premises he should act. Mr. T. Smith said the tying-down to definite hours need never have arisen if chemists had only stuck to their original arrangement of being open during their usual hours of business.

Middlesex. — A meeting of the Middlesex Pharmaceutical Association was neld on April 14 in the library at 17 Bloomsbury Square, London, W.C. The President, Mr. John T. Humphrey, was in the chair. Mr. Peake, of the Thames Valley Association, reported an agreement with the North London Association that a concerted movement should be made at the P.A.T.A. annual meeting in order to secure a more satisfactory profit on lines that at present do not pay for handling. In the discussion that ensued it came out that P.A.T.A. officials regard the proposal as impracticable, but this only served to stiffen the resolution to see the thing through. A resolution from Harrow recommending resignation from the panel en bloc unless more satisfactory arrangements for payment were made was passed on to the Pharmaceutical Committee to take suitable action.

Newcastle-upon-Tyne.—A meeting of the Newcastle-upon-Tyne Pharmacists' Association was held on April 14. Mr. H. Noble, Ph.Ö., occupied the chair. The subject for discussion was "Trade Matters," and consisted of five papers, which were read by the Secretary on behalf of the authors: (1) "The Pharmacist: His Military and Naval Status"; (2) "An Apprentice's View of Pharmacy"; (3) "The Elimination of Trade from Pharmacy"; (4) "How to Attract Business"; (5) "The Scarcity of Apprentices." After the reading of each paper, short discussions followed. The most-appreciated paper was undoubtedly the "Apprentice's View of Pharmacy," which kept the audience in laughter and amusement. Messrs. Noble, Kerse, Buckley, Wright, Fleming, Gilderdale, Turnbull, and Hunter spoke on the various subjects for discussion.

A meeting of the Nottingham Pharmatical Association was held at the Flying Horse Hotel April 21. The chair was occupied by the Vice-Preent (Mr. A. Middleton). There was a very good endance. The Chairman reported that 11. 7s. had been to the Benevolent Fund from the collecting-boxes address entitled The Insurance Act, a Retrospect and ospect, was delivered by Mr. A. Eberlin, J.P. Mr. erlin outlined the course of the Act from its inception wn to the present time, and expressed the opinion that far as this area is concerned the working of the Act on the whole been satisfactory. A discussion followed, which Messrs. E. S. Waring, Smith, Middleton, and the working of the Act of the working of the Act of the whole been satisfactory.

eting of the Oldham and District Pharmaceutical Assotion, which was reld at the Café Monico on April 13. the whole of the officers were re-elected, but the offices the secretaries for general purposes and National ealth Insurance were combined. A satisfactory assurer's report was submitted, and a donation of 5l. s voted to the Relief Fund for Belgian pharmacists of medical men.

Royal Society of Arts.—A meeting of the Royal ciety of Arts was held on April 14, Captain Charles S. Phillips, F.R.S.E., in the chair. Mr. T. Thorne ker read a paper on "The Industrial Uses of Radium," the course of which he stated that he had found that ute radium-salts—e.g., radium barium sulphate, conning 1 part in 1 million of radium-element—is completely soluble in molten common salt. Salt so prepared d containing approximately 1.375 milligram of uBr₂,2H₂O per ton is now being extensively used under a name of "Rabasa" for medical baths. It had been ed with highly satisfactory results in the cases of veral officers who had returned from the trenches at the out suffering from acute rheumatism, and it is hoped at this salt will, to a large extent, do away with the cessity of visiting Continental resorts, such as Karlsbad Gastein, where radio-active baths are available; and, of the continuation of the continuation of the expense of radium-attent in Germany. The present price of pure radium omide, said the lecturer, varies from 18,000% to 25,000% or gram, or 18% to 25%. per milligram.

Sheffield.—A meeting of the Sheffield Pharmaceutical d Chemical Society was held on April 15, Mr. J. Gilbert ckson presiding. The Hon. Secretary (Mr. Furnival) ad a letter from the Treasurer of the Belgian Doctors' d Pharmacists' Relief Fund acknowledging with thanks sum of 221. 15s. sent by the Sheffield Society. This, e President explained, is the outcome of the efforts the Council, who had sent an additional 51. 5s. along ith 51. raised by a private entertainment, making M. in all. An interesting paper followed, entitled Dispensing Notes," by Mr. Harold Wyatt, Ph.C., ootle, in which the author gave from a wide and aried experience many hints in dispensing of a practal and helpful nature. He appealed to the younger embers of the craft never to throw anything down the nk without first endeavouring to find the reason why had gone wrong, and when any difficulty has been expected to make an entry of the solution in a note reversible that the dispenser who never has anything go wrong or never comes across difficulties is not entry careful, and will certainly not learn much. "The gally-qualified, practical pharmacist will always have is place and his price," was one of Mr. Wyatt's phorisms, but the man who is content with the knowledge required to pass his examination is not likely to make much progress in his profession. Mr. Wyatt's phorisms, but the man who is content with the knowledge required to pass his examination is not likely to make much progress in his profession. Mr. Wyatt's phorisms, but the man who is content with the knowledge required to pass his examination of the metric ystem in the new Pharmacopoeia, and gave several xamples from foreign prescriptions of the dangers of the system which may be looked for. He classed the ew edition as the work of amateurs. The President, no opening the discussion, said even the oldest member ould gather many useful hints from the lecture. Mr. I. T. Appleton, in moving a vote of thanks, thought Mr.

Wyatt might have given the students some hints of how to get over the examiners. The members then adjourned for tea on the invitation of the Council.—A special general meeting of the Society was held on April 21, when Mr. Anteliffe moved:

"That the annual general meeting of the Society be held during the first week in July, instead of September as provided for by Rule 9."

The resolution was carried. A general meeting followed, when the compulsory Closing Order applied for by the City Council, who are anxious that pharmacists should give it their support, was considered. It was decided to request the Council to make an order for the holiday to be fixed for Thursday. A letter was received from the Grocers' Association asking for the Society's support to earlier general closing. After a long discussion it was decided, on the motion of Mr. J. T. Appleton, to ask the City Council to support earlier closing—namely, 8 o'clock on weekdays and 10 p.m. on Saturdays. Messrs. J. Gilbert Jackson and Furnival were appointed to meet the Grocers' Association.

Swansea.—The annual meeting of the Swansea and West Glamorgan Chemists' Association was held on April 15 at the Cameron Hotel, Swansea, Mr. Arnold, of Cwmavon (President), in the chair. The following were elected officers for the ensuing year: President, Mr. H. S. Arnold, Cwmavon; Vice-President, Mr. T. Dryden, Landore; Treasurer, Mr. J. Rees, St. Thomes; Hon. Secretary, Mr. W. T. Thomas, Gorseinon. A discussion ensued regarding the discounting of Ingurance dispensing accounts, and Mr. Trick (London), who was proceed, gave his views of the situation, especially now that the Government has recognised the injustice of the discounting system. The meeting regarded the grant of 60,000l. as quite inadequate to meet the deficiency, and a resolution was passed urging the Pharmaceutical Council to obtain payments on "a more magnanimous basis."

West Ham .- A meeting of the West Ham, East Ham, and Metropolitan Essex District Association of Pharmacists was held on April 15 at Earlham Hall, Forest Gate. It was agreed that the day of meeting should be altered from the second Thursday in the month to the third Thursday, that being a more convenient day. Mr. Kirk-patrick, reporting on a deputation which waited on Mr. Edmund White regarding the price of chemicals, said that salicylates could be made in this country at a very much lower rate than chemists are now paying for them. The Society was asked to approach the Government with a view to some action being taken for the benefit of the public. Mr. Lloyd reported on the Essex Pharmaceutical Committee's work. He said the new method of checking prescriptions required the chemist to send them in batches under the different doctors' names. No local Formulary is in use, only the B.P. Codex being recognised. Mr. Potter, reporting for the West Ham Pharmaceutical Committee, said that 200l. had been surcharged for the first six months of 1914, while any further consideration of 1913 had been dropped by the Insurance Committee. He had endeavoured to get it referred back to the Panel Committee, but had been defeated by three votes. With regard to the attempt to reintroduce the local Formulary, the Commissioners had said that the Panel Committee was to decide, providing it did not effect changes in administration. As it was held by the Clerk of the Committee that it does affect administration, the Committee decided not to take any further action. Mr. Kirkpatrick acid all Acceptations should interchange environments of discontinuous for di said all Associations should interchange opinions for discussion. He proposed that pharmacists should co-operate on similar lines to medical men in the British Medical Association, which is an independent organisation, and has no statutory duties to perform. The Pharmaceutical Society is limited in its duties by statute. He proposed to approach other London Associations, asking them to appoint delegates to meet and organise a scheme for selfdefence: The meeting agreed that the idea is good, and appointed the following as delegates from the Association: Messrs. Kirkpatrick, Lloyd, Matthews, Miller, Potter, and Johnson.

Wolverhampton.—A meeting of the Wolverhampton Chemists' Association was held on April 14, Mr. Bowdler

(Vice-President) in the chair. A letter of congratulation (Vice-President) in the chair. A letter of congratulation was sent to Mr. F. J. Gibson upon his re-election to the Council of the Pharmaceutical Society. The Secretary was instructed to write to A. & F. Pears, Ltd., asking them to protect the price of Pears' soap. Mr. Scholefield then read a paper entitled "A Chat on Modern Chemists' Businesses." He reviewed the changes which had taken place, especially since the introduction of the National Insurance Act; he referred to the scarcity of assistants, methods of taking stock and keeping books, and packing specialities. The paper was much enjoyed, but there was no time for discussion.

Market Matters.

Heavy-chemical Market.

The chief feature in this market is the continual advances hich are taking place in all classes of chemicals. In heavy which are taking place in all classes of chemicals. which are taking place in all classes of chemicals. In heavy descriptions there is not much change to record, but in other respects advances have been sharply defined. Caustic soda is in good demand at 131, 128, 6d, to 141, 128, 6d, for 77-per-cent. on export account; 70 to 72 per cent. is 121, 15s, to 131, 15s,, and 60 to 62 per cent. 111, 15s, to 121, per ton, on rails, for home delivery. Bicarbonate of soda and sodaerystals show little change. Bleaching-powder is quoted 77, 5s, to 77, 10s, per ton exposite or rails at works and for erystals show little change. Bleaching powder is quoted 7l. 5s. to 7l. 10s. per ton prompt on rails at works, and for contract account 6l. 7s. per ton. White powdered arsenic is lower at 16l. 10s. to 17l. per ton, delivered Manchester. Sulphato of copper is quiet, notwithstanding the advance in the raw metal, and may be quoted 2sl. 17s. 6d. to 29l. delivered Manchester. Cream of tartar favours sellers. Oxalic acid is 1d. and tartarie acid ½l. per lb. higher. Citric acid unchanged. The greatest change is to be noted in lead-products: Litharge is 2sl. 15s.; nitrate of lead, 36l. to 38l.; white acctate of lead, 37l. to 39l.; brown, 35l. to 36l.; brown sugar of lead is not quoted. Sulphur favours sellers. Sal-ammoniae is 10s. to 20s. per ton higher on the week. Chlorate of potash is 3d. per lb. lower. Carbonate of potash is nominal. Caustic potash is 10l. to 15l. per ton higher. Carbolic acid shows little change, and prices may be regarded as nominal. be regarded as nominal.

Continental Drug and Chemical Markets.

The following notes chiefly refer to the Hamburg and Berlin markets up to April 10:

ACETYL-SALICYLIC ACID.—Makers have advanced their prices by m.50 per 100 kilos, on account of the rise in raw materials. rials; they quote from m.470 to m.570 per 100 kiles. as to quantity.

AMMON. CHLOR. has again advanced to m.58 for technical to 100 per cent., and chemically pure to m.60 per 100

BORAX AND BORIC ACID.—Though the makers continue to quote prices, only second-hand lots are obtainable in Hamburg; m.85 is asked for borax-crystals, and m.87 for refined powdered borax. Boric-acid crystals have been sold at powdered borax. m.100 per 100 kilos.

CANTHARIDES.—The demand for Russian cantharides can still be supplied; from m.27 to m.28 per kilo. is asked.

CEVADILLA has been sold in small quantities only; the price is unchanged at m.160 per 100 kilos.

CITRIC ACID is firmer on increased demand at m.575 per 100 kilos.

Coumarin has advanced by m.8 per kilo, to m.35

Ergor is dull. Russian is offered at m.625 and Spanish m.650 per 100 kilos.

KOLA has been more in demand. African is quoted m.135 to m.140, and West Indian at from m.130 to m.125 per 100 kilos.

OILS (ESSENTIAL).—Star-anise is obtainable at m.16 to m.16.50 per kilo. Cassia is m.9.25 per kilo., showing a considerable advance. Fir-tree is to be had at m.3 per kilo. Menthol is firmer at m.36 per kilo. Japanese mint is firmer also and is m.12.50 to m.13 per kilo. Petitgrain is m.26 per kilo. Safrol prices have also advanced to m.3 per kilo. Ous (Europ) and Fars—Castor of first-pressing is m.300.

kilo. Safrol prices have also advanced to m.3 per kilo. Olls (Fixed) and Fars.—Castor of first-pressing is m.300. Coconut is firm at m.185. Cod-liver has again advanced. in consequence of increased demand by all countries; noncongealing is offered at from m.190 to m.195. Cottonseed is not offered. Earth-nut is firm at m.165. Linseed is now cheaper. Firms who have never before dealt in oil-seeds or oils recently bought large quantities of linseed oil for speculation, and this caused the prices to advance considerably. At present large quantities are offered, and, the demand being only small, prices have declined by from m.8 to m.10. Oil is at present obtainable for April delivery at m.131. Dutch is 4 guilders cheaper. Olive is firm at m.180 to m.190.

Palm is m.170. Rape is very firm and shows a tendency to advance in price; crude oil is in active demand and has been sold at m.165. Tallow is firm, at from m.170 to m.180 for soap-manufacture and from m.185 to m.195 for foodtallow. Whate oil is quiet; No. 0 is m.145, No. 1 m.140, No. 2 m.135, and No. 3 m.125. Hankow wood is cheaper at

SALOL has advanced by m.50, and is quoted at from m.425

to m.450 per 100 kilos.

SHELLAC is firm. TN is quoted from m.200 to m.210 per 100 kilos., AC Garnet from m.220 to m.225, and GAL from m.205 to m.210.

m.205 to m.210.

TAPIOCA-MEAL has been sold in enormous quantities at steadily advancing prices. At the moment from m.85 to m.90 per 100 kilos. is quoted, according to quality.

TARTARIC ACID is in active demand, though it is supposed that the demand greatly exceeds consumption at the moment, purchases being made for the summer; from m.350 to m.360 has been paid.

WAXES—Bees' is firm and dear, only small quantities being offered. Fair bleached is from m.375 to m.380: middling sorts from m.365 to m.370 per 100 kilos. Carnauba is somewhat firmer; sandy-grey is quoted at from m.417.50 to m.420, and fatty-grey at from m.425 to m.430 per 100 kilos. Japanese remains firm at m.215 per 100 kilos.

Coming Events.

This section of the "C. & D." is reserved for advance notices of meetings or other events. These should be sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Tuesday, April 27.

Wellcome Bureau of Scientific Research, 10 Henrietta Street,
Cavendish Square, London, W., 3 to 5 p.m. Mr. M. E.
MacGregor will give a demonstration on "Lice and their
Prevention." All interested are invited.

Wednesday, April 28.

Royal Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Mr. A. S. E. Ackermann on "The Utilisation of Solar Energy."

Energy."

South-Western Pharmacists' Association. Restaurant Frascati,
Oxford Street, London, W., at 7 p.m. Dinner in aid of the
Belgian Doctors' and Pharmacists' Relief Fund, Teker and the
each) from Mr. E. A. Atkins, Tl East Hill, Wandsworth.

Public Pharmacists' and Dispensers' Association, Et. Bride Institute, Bride Lane, Ludgate Circus; E.C., at 8 p.m. The
following papers will be read: "Life and Training of a
Chemist's Apprentice Half a Century Ago," by Mr. T. S.
Goodall; "A Pharmacist in the Far East," by Mr. H. C. T.
Gardner; "Our History," by Mr. J. H. France.

Thursday, April 29.

ucestershire Pharmacists' Association, Plough Hotel, H'7h Street, Cheltenham, at 9 p.m. Mr. J. Spencer Palmer, "Jot-tings and Reminiscences of Pharmacy."

Friday, April 30.

Royal Institution of Great Britain, Albemarle Street, Piecedilly, London, W., at 9 r.m. Professor F. G. Donnan on "Emulsions and Emulsification."

WESTERN PHARMACISTS' ASSOCIATION.—A whist-drive will be held in the Gordon Hell, Restaurant Frascati, Oxford Street, London, W., on May 6. Tickets (4s. 6d. each) from the Hon. Secretaries, Mr. A. Latreille, 48 Baker Street, W., and Mr. W. E. D. Shirtliff, 66 Coldbank Part W. 66 Goldhawk Road, W

The rooms of the Chemical Society will be opened for an informal meeting on April 29, at 8 r.m., when the President and Council will be glad to receive Fellows. Smoking will be permitted, and light refreshments will be provided. Fellows are invited to exhibit apparatus and specimens of interest, and to show experiments; those Fellows wishing to do so are requested to communicate with the Assistant Secretary not later than Monday, April 26.

BISMARCK'S CONNECTION WITH PHARMACY.—Dr. Adolf Kolut contributes to the "Pharmazcutische Zeitung" some notes contributes to the "Pharmazcutische Zeitung" some notes regarding the connection of Bismarek with medicine, pharmacy, and science, à propos of the centenary of the birth of that statesman. He is said to have shown a predilection for the study of pharmacy and chemistry when a youth, with a view to improving the agricultural methods as praetised of his father's estate. This is alleged to have eaused Bismarck to treat chemical and pharmaceutical science with great respect. It was due to him that the Pharmacopocia Germanica was published in 1872 in place of the various Pharmacopocias of the Federal States. Bismarck also studied botany, and made botanical and medical allusions in his specches. He said, for instance: "Laws bear a great resemblance to medicaments, as they are generally made for curing a nation of some temporary disease"; and "You will be obliged to add a few drops of social oil to the prescription you prepare on behalf of the State."

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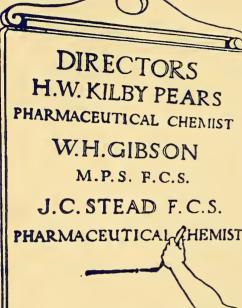
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